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EDITORIAL

WORLD AYURVEDA DAY CELIBRATION AND CONTRIBUTION OF OUR ASSOCIATION

The Government of India designated September 23rd as a fixed calendar date via a Gazette Notification in March 2025, moving away from the previous lunar-based Dhanvantari Jayanti (Dhanteras) to provide global consistency. The focal theme for Ayurveda Day 2026 is ***"Ayurveda for a Healthier Tomorrow".*** *The day promotes Ayurveda as a scientific, evidence-based, and holistic system of medicine focused on preventive healthcare, wellness, and living in balance with nature. Events, free health camps, awareness campaigns, and international collaborations are coordinated globally by the Ministry of Ayush.*

I feel proud that since inception of our association, we have successfully organized 25 National and 8 International conferences at different institutions all over the country. This is to be noted that we have made some concrete road map for the upgradation and upliftment of Ayurveda in the21st century.

The propagation of ***Sangyaharan, Pain Management through Ayurveda, Role of Ayurveda in Cancer management through Aurvedic Palliative care and Role of Ayurveda in intensive care through its specific diet, drug and therapies*** *was first time given importance during the First National Conference of A.A.I.M. held at Section of Sangyaharan, Department of Shalya Shalakya in the year 1998. This was further accepted by C.C.I.M. New Delhi and also continued by the Ministry of Ayush through its themes of Ayurveda Days celebrations. Now every institution is taking interest to explore new possibilities in this area but surprisingly Sangyaharan is ignored after all its viability.*

I express my deep concern about the need of Sangyaharan in Ayurved and emphasize to restore P. G. Sangyaharan by NCISM, Delhi. To raise our voice, we are trying to continue our efforts to organize every year our national conference in different corners of the country. Our goal is clear and firm. No doubt we will achieve it and will not stop till we achieve.

Jai Hind **Jai Ayurved** **Jai Sangyaharan**

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Modern and Ayurveda-Based Anesthesia and Surgery

A Comparative and Integrative Review of Sangyaharana and Shalya Tantra Alongside Contemporary Anaesthesiology and Surgical Practice

Dr. Shafaque Kamran[*]

Abstract: Long before the formal birth of Western anaesthesiology in 1846, ancient Indian physicians had already developed a systematic approach to painless surgery. This review traces the parallel and, at points, convergent histories of Ayurvedic surgery (Shalya Tantra) and Ayurvedic anaesthesia (Sangyaharana) as codified chiefly in the Sushruta Samhita (circa 600 BCE), and compares them with the evolution and current practice of modern anaesthesia and surgery. It examines the herbal, mineral, and psychosomatic agents used by Acharya Sushruta and Acharya Charaka — including Madya (wine), Vijaya/Bhanga (Cannabis sativa), Ahiphena (opium), Dhatura, and Parasika Yavani (Hyoscyamus niger) — against the ether-, nitrous oxide-, and cocaine-derived agents that founded modern anaesthesiology, and the general, regional, and local anaesthesia techniques used today. It further reviews Sushruta's 121 surgical instruments and eight fundamental operative techniques (Ashtavidha Shastra Karma) alongside the trajectory of modern surgery from open operative technique through asepsis to minimally invasive laparoscopic and robotic surgery. A comparative framework, a review of the literature-search strategy, and a summary of ongoing AYUSH-supported integrative research are presented, concluding that while Ayurveda has not yet produced a validated potent surgical anaesthetic, its premedication, pain-management, and perioperative care principles continue to offer avenues for evidence-based integration with modern practice.

Keywords : Sushruta Samhita, Sangyaharana, Shalya Tantra, General Anaesthesia, Regional Anaesthesia, Ayurveda-Modern Integration, AYUSH

1. Introduction

Anaesthesia the reversible abolition of pain and consciousness to permit surgical intervention is often presented as a nineteenth-century Western achievement, beginning with the public demonstration of ether anaesthesia by William T. G. Morton in 1846[1].

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Yet more than two millennia earlier, Acharya Sushruta of ancient India had already described a structured system of surgical pain abolition termed Sangyaharana, embedded within a broader surgical science called Shalya Tantra, one of the eight classical branches (Ashtanga) of Ayurveda[2,3]. The Sushruta Samhita, compiled between roughly the sixth and fourth centuries BCE, documents over 300 surgical procedures, 121 surgical instruments, and detailed pre-, intra-, and post-operative protocols — a level of systematisation that would not reappear in European medicine until the nineteenth century[4,5].

This review sets the Ayurvedic surgical and anaesthetic tradition side-by-side with the historical development and current practice of modern anaesthesiology and surgery. The objective is not to claim equivalence between an ancient empirical system and modern evidence-based pharmacology, but to understand each system on its own terms, identify genuine points of technical convergence (such as pedicled-flap reconstruction and premedication), and survey where contemporary integrative research is testing Ayurvedic agents against modern pharmacological and safety standards.

1.1 Literature Search Strategy

Source material for this review was identified through structured searches of biomedical and AYUSH-specific literature databases. PubMed and its full-text repository PubMed Central (PMC) were searched for peer-reviewed biomedical literature on the history of anaesthesia and surgery, using terms including “Sushruta,” “Sangyaharana,” “history of anaesthesia,” and “Ayurveda surgery.” Ayurveda-specific and integrative-medicine literature was identified through DHARA (Digital Helpline for Ayurveda Research Articles), a bibliographic database that indexes published Ayurveda research[6], and through the AYUSH Research Portal maintained by the Ministry of AYUSH, Government of India, which aggregates evidence-based research data across the AYUSH systems[7]. Government and institutional sources (Press Information Bureau releases, AIIMS departmental pages, and CCRAS clinical-research pages) were consulted directly for information on current integrative-research infrastructure. Sources lacking identifiable authorship, editorial oversight, or institutional provenance were excluded in favour of peer-reviewed journal articles, indexed reviews, and official government or institutional publications.

2. Ayurvedic Surgery: Shalya Tantra

2.1 The Sushruta Samhita and Its Scope

The Sushruta Samhita is organised into six sections (Sutrasthana, Nidanasthana,

Sharirasthana, Chikitsasthana, Kalpasthana, and Uttaratantra) spanning 184 chapters. It catalogues 1,120 diseases, 700 medicinal plants, 64 mineral-based preparations, and 57 preparations of animal origin[8,32]. Sushruta insisted that no surgeon should operate without first studying the human body through dissection: cadavers were wrapped in grass and bark, caged, and submerged in flowing river water for seven days to soften tissue for controlled, layer-by-layer study — skin, fascia, muscle, vessels, nerves, and bone[8]. Trainees then practised specific techniques on surrogate materials before touching a living patient: incision on gourds and watermelons, probing on worm-eaten wood or bamboo, suturing on leather and cloth, and extraction using seeds embedded in fruit — a simulation-based curriculum lasting a minimum of six years[8,9].

2.2 Trividha Karma: The Three-Phase Surgical Framework

Sushruta divided every surgical case into three sequential phases, Trividha Karma, a structure that maps closely onto the modern pre-operative/intra-operative/post-operative continuum[3,10]:

- **Poorva Karma (pre-operative care)** — examination of the patient and disease, physical and psychological preparation, dietary regulation, purification procedures (Snehana, Swedana, Vamana, Virechana), counselling and reassurance (Ashwasana), and administration of pre-anaesthetic agents.
- **Pradhana Karma (the primary operative act)** — the surgery itself, performed once Sangyaharana had reduced sensory awareness, encompassing the eight classical operative techniques described below.
- **Paschat Karma (post-operative care)** — wound management, herbal dressings, pain control, monitoring for complications, and dietary/psychological rehabilitation.

2.3 Ashtavidha Shastra Karma: Eight Fundamental Operative Techniques

Sushruta classified all operative manoeuvres into eight fundamental techniques, still cited as the conceptual ancestors of modern operative categories[11]:

Sanskrit Term	Technique	Modern Correlate
Chedana	Excision	Removal of diseased tissue/tumours
Bhedana	Incision	Opening abscesses/cysts
Lekhana	Scraping	Debridement of growths/scar tissue

Sanskrit Term	Technique	Modern Correlate
Vedhana	Puncturing	Drainage of joints/abdomen (paracentesis)
Eshana	Probing	Exploring sinus tracts/fistulae
Aharana	Extraction	Removing calculi, foreign bodies, dead foetus
Visravana	Drainage/blood-letting	Continuous evacuation of pus/blood
Seevana	Suturing	Wound closure/anastomosis

2.4 Instrumentation: Yantra and Shastra

Sushruta described 121 surgical instruments in total: 101 blunt instruments (Yantra) — forceps (Sandamsha), specula, retractors, hooks, tubes, and probes, each named after the animal or object it resembled — and 20 sharp instruments (Shastra), including scalpels (Vriddhipatra), scissors, lancets, needles, and saws of graded sizes[12]. Instruments were forged from tempered iron, bronze, or copper and sharpened until capable of cutting a hair; despite this arsenal, Sushruta held that the surgeon's own hand remained the most important instrument of all, for its sensitivity and adaptability[9].

2.5 Landmark Procedures

- **Rhinoplasty (Nasa Sandhana):** reconstruction of an amputated nose using a rotated cheek or forehead pedicle flap, with bamboo tubes inserted to maintain nostril patency and a honey–ghee–sesame oil dressing to promote healing. This "Indian flap" technique, witnessed by British surgeons near Pune in 1793 and documented in the *Gentleman's Magazine* in 1794, remains the conceptual foundation of modern reconstructive flap surgery[12,13].
- **Cataract surgery (couching):** a jasmine-bud–tipped probe (Jambavati Shalaka) was introduced through the sclera to displace the opacified lens, an approach that predates European couching descriptions by centuries[8,13].
- **Living sutures and biological closure:** the mandibles of large ants were used to clamp wound edges as biological staples, and bengal-gram heads were used for intestinal anastomosis — among the earliest documented forms of biological wound closure[8].

- **Lithotomy, hernia and fistula repair, and Caesarean section** (performed as a last-resort procedure when the mother had died but the foetus remained viable) are also described in detail, along with fracture and dislocation management with traction, manipulation, and stabilisation[10,14].

Sushruta additionally practised early antisepsis: instruments were flame-sterilised, operating and recovery areas were fumigated (Dhoopana) with antimicrobial herbs such as guggulu, vacha, white mustard, and neem, and wounds were dressed with turmeric, honey, and ghee — centuries before the articulation of germ theory[13].

3. Ayurvedic Anaesthesia: Sangyaharana

Sangyaharana literally denotes a "reversible loss of sense." In Ayurvedic physiology, obstruction of the sensory channels (Sangyavaha Nadi) by Vatadi Doshas increases Tamo Guna, dulling the perception of both pleasure and pain — the theoretical basis on which Ayurvedic anaesthetic agents were understood to act[3,15].

3.1 Core Agents

Sushruta's principal anaesthetic agent was Madya (fermented wine), often preceded by Guru Bhojana (a heavy pre-anaesthetic meal intended to induce rapid drowsiness, Nidra Adhikya) — a sequence that functions much like a modern pre-medication followed by an induction agent[3,16]. Beyond wine, the classical texts describe a range of sedative-analgesic substances:

Ayurvedic Agent	Botanical/Source	Classical Use
Madya	Fermented wine	Principal intra-operative sedative/analgesic
Vijaya / Bhanga	*Cannabis sativa / indica*	Sedation, analgesia, post-operative pain relief
Ahiphena	*Papaver somniferum* (opium)	Narcotic analgesic
Parasika Yavani	*Hyoscyamus niger* (henbane)	Sedation, tranquillisation
Dhatura	*Datura metel*	Anticholinergic sedative (atropine-like)

Ayurvedic Agent	Botanical/Source	Classical Use
Vacha	*Acorus calamus*	Neuroactive sedative, pre-medicant
Jatamansi	*Nardostachys jatamansi*	Tranquillisation, anxiolysis
Ashwagandha	*Withania somnifera*	Tranquillisation, adaptogenic support
Vatsanabha	*Aconitum ferox*	Potent analgesic (used with caution)

Table: Principal agents described for Sangyaharana and peri-operative sedation in the Sushruta Samhita, Charaka Samhita, and Bhavaprakasha Nighantu[3,15,16,17].

The Charaka Samhita, though primarily a treatise on internal medicine, corroborates these practices, recommending Sura, Madira, and Asava (fermented preparations) to reduce pain during delivery of an obstructed foetus[16,17]. Bhavaprakasha, a later pharmacognosy text, records the analgesic use of Ahiphena and Bhanga[16].

3.2 Legendary and Semi-Legendary Accounts

Later texts describe more dramatic accounts of surgical anaesthesia. Bhojaprabandha (circa 900 CE) narrates that surgeons from Ujjain administered a stupefying powder, Sammohini Churna (described as comparable in effect to modern chloroform), to render King Bhoja unconscious for brain surgery, reviving him afterward with a revitalising powder, Sanjeevani[16,18]. Sanjeevani is independently referenced in the Valmiki Ramayana as the herb used by the physician Sushena to revive Lakshmana[16,18]. Neither text specifies the precise botanical composition of these preparations, and they are treated by contemporary scholars as historically suggestive rather than pharmacologically verified[3].

3.3 Classification and Route of Administration

Ayurvedic anaesthetic practice can be broadly grouped into Samanya (systemic/general) methods, using agents such as Madya or Ahiphena to induce generalised unconsciousness, and Vishesha (localised/specific) methods, using topical pastes (Lepa), fumigation (Dhumapana), or targeted herbal application to numb a specific region — a distinction that anticipates the modern general-versus-regional/local classification[15,28]. Complementary techniques included Marma therapy, Raktamokshana (therapeutic blood-letting), Ksharakarma (alkaline cauterisation), Agnikarma (thermal cauterisation), and psychosomatic methods such as mantra recitation, counselling, and what is termed Satvavajaya Chikitsa (mind-control therapy) to reduce peri-operative

anxiety — conceptually close to modern pre-operative counselling and anxiolysis[15,19].

It is important to note a consistent limitation acknowledged across the Ayurvedic surgical literature itself: no single potent, reliable, general Ayurvedic anaesthetic agent capable of replacing modern anaesthetics has been definitively identified or standardised to date. Most indigenous agents identified in classical and review literature (Jatamansi, Ashwagandha, Brahmi, Vacha, Parasika Yavani, Shankhapushpi) are used chiefly as pre-medicants or post-operative adjuncts for tranquillity, anxiolysis, and pain reduction rather than as stand-alone surgical anaesthetics[3,20].

4. The Evolution of Modern Anaesthesia

Western anaesthesiology as a formal medical discipline emerged in the 1840s. Diethyl ether, first described for its analgesic properties by Paracelsus around 1525, was publicly demonstrated as a surgical anaesthetic by William T. G. Morton in Boston in October 1846 — the event that conventionally marks the birth of modern anaesthesia[1]. Humphry Davy had already identified the anaesthetic potential of nitrous oxide at the turn of the nineteenth century, and Horace Wells used it clinically for dental extraction in 1844-45, though his public demonstration was initially considered a failure[1,21]. Chloroform, introduced by James Young Simpson in November 1847 as a more potent alternative to ether, rapidly became the dominant surgical and obstetric anaesthetic of the mid-nineteenth century, despite its narrower margin of cardiac safety[1,21]. The physician Oliver Wendell Holmes coined the terms “anaesthesia” and “anaesthetic” in a letter to Morton in 1846[1].

Local anaesthesia developed along a separate track. Cocaine, isolated from the coca leaf by Albert Niemann in 1860, was shown by Carl Koller in 1884 to produce corneal anaesthesia, inaugurating regional and local anaesthetic practice; the following decades saw the development of nerve-block techniques for the brachial plexus and other peripheral targets[22,23]. Safer synthetic local anaesthetics (procaine, lidocaine, bupivacaine) subsequently replaced cocaine for clinical use[23,24].

4.1 Modern Classification of Anaesthesia

- **General anaesthesia:** reversible, drug-induced loss of consciousness, protective reflexes, and sensation, produced by inhalational agents (e.g., sevoflurane, isoflurane, nitrous oxide) and/or intravenous agents (e.g., propofol, thiopentone, ketamine), typically combined with muscle relaxants and opioid analgesics and monitored continuously by an anaesthesiologist.

- **Regional anaesthesia:** reversible blockade of nerve conduction to a region of the body (spinal, epidural, and peripheral nerve blocks) using local anaesthetics such as lidocaine and bupivacaine, with the patient typically remaining conscious.
- **Local anaesthesia:** anaesthesia confined to a small area, commonly by infiltration, for minor surgical or dental procedures.
- **Monitored anaesthesia care/sedation:** a continuum of sedation levels used to supplement regional/local techniques or for minimally invasive procedures.

Modern anaesthetic practice is distinguished from its Ayurvedic antecedent primarily by pharmacokinetic precision (titratable dosing, rapid onset/offset, predictable half-lives), continuous physiological monitoring (pulse oximetry, capnography, invasive haemodynamic monitoring), and rigorous pre-clinical and clinical safety validation — none of which existed, or could have existed, in the ancient period[21,23]. Premier Indian tertiary-care institutions such as AIIMS, New Delhi formalise this precision through dedicated Departments of Anaesthesiology running structured Pre-Anaesthesia Check-up clinics and continuous protocol-driven perioperative care[37].

5. The Evolution of Modern Surgery

Modern surgery's decisive advances followed the introduction of anaesthesia (permitting longer, more complex operations), Listerian antisepsis and later asepsis (dramatically reducing post-operative mortality from infection), and, in the twentieth and twenty-first centuries, a progressive shift toward minimally invasive technique. Diagnostic and therapeutic laparoscopy matured through the 1980s-90s into routine practice for cholecystectomy, appendicectomy, and gynaecological procedures, offering smaller incisions, reduced blood loss, and faster recovery relative to open surgery[25]. Robot-assisted surgical platforms, introduced clinically from the early 2000s, extended these advantages further — providing tremor-filtered, wristed instrumentation and three-dimensional magnified visualisation for procedures in confined anatomical spaces such as the pelvis[25,26]. Natural-orifice transluminal endoscopic surgery (NOTES) and single-incision laparoscopic surgery represent further refinements aimed at eliminating visible scarring altogether[26].

Notably, several structural principles first articulated by Sushruta persist in modern surgical training and practice: pre-operative patient assessment and fitness grading, aseptic preparation of the surgical field, standardised and purpose-built instrumentation, staged operative technique, and systematic post-operative wound surveillance are all direct descendants — independently rediscovered in the West — of

the Trividha Karma framework described in Section 2.2[5,10].

6. Post-operative Infections and Prevention

Surgical site infection (SSI) remains one of the most common healthcare-associated infections worldwide and a major driver of post-operative morbidity, prolonged hospital stay, and cost[39,41]. A multicentre surveillance study spanning six Indian cities, conducted under the International Nosocomial Infection Control Consortium, found SSI rates for several procedure categories exceeding benchmark data from high-income-country surveillance networks, underscoring that infection prevention is a determinant of surgical outcome rather than a peripheral safety measure, particularly in resource-constrained settings[40]. The World Health Organization's Global Guidelines for the Prevention of Surgical Site Infection (2nd edition, 2018) set out an evidence-graded bundle of pre-, intra-, and post-operative measures — preoperative bathing, surgical hand antisepsis, correctly timed antibiotic prophylaxis, alcohol-chlorhexidine skin preparation, maintenance of normothermia and euglycaemia, and sterile technique during dressing changes — that, when implemented together as coordinated care bundles rather than as isolated measures, produce a consistent reduction in SSI incidence[39,41].

Sushruta's own Paschat Karma protocols (Section 2.2) anticipated several of these principles empirically, centuries before the articulation of germ theory: flame-sterilised instruments, fumigation of the operative theatre with antimicrobial herbs (Dhoopana), and wound dressings combining honey, turmeric, and ghee (Section 2.5)[8,22]. Contemporary pharmacological studies lend partial support to these traditional wound-care practices. Honey (Madhu), applied according to Sushruta's Shashthi Upakrama, has demonstrated antibacterial and debriding activity in clinical observation of chronic wounds (Dushta Vrana)[42,43]; topical Neem (*Azadirachta indica*) oil combined with systemic Haridra (*Curcuma longa*/turmeric) has shown measurable benefit in non-healing wounds of leprotic, venous, and pressure-ulcer aetiology[44]; and a broader review of Ayurvedic Vrana Chikitsa (wound management) attributes the antimicrobial activity of formulations such as Jatyadi and Panchavalkala taila/malahar to their combined anti-inflammatory and antibacterial phytochemistry[45].

As with anaesthetic agents, these Ayurvedic wound-care agents currently function best as adjuncts within, rather than replacements for, a modern evidence-based infection-prevention bundle: none has been validated in adequately powered randomised trials against standard antiseptic and antibiotic prophylaxis protocols, and their role is consistent with the broader integrative-research framework discussed in

Section 8.

7. Comparative Analysis

The table below summarises key dimensions of contrast and convergence between the Ayurvedic and modern systems.

Dimension	Ayurvedic System (Shalya Tantra / Sangyaharana)	Modern System
Historical origin	~600 BCE, Sushruta Samhita	1846 CE onward (ether, chloroform, nitrous oxide)
Anaesthetic agents	Madya, Vijaya/Bhanga, Ahiphena, Dhatura, Parasika Yavani	Propofol, sevoflurane, lidocaine, bupivacaine, ketamine
Mechanism understanding	Empirical/experiential; explained via Dosha-Guna theory	Receptor-level pharmacology (GABA-A, NMDA, sodium channels)
Dosing precision	Qualitative, constitution (Prakriti)-based	Weight/age-based, titratable, monitored in real time
Monitoring	Surgeon's clinical observation only	Continuous multiparameter electronic monitoring
Instrumentation	121 hand instruments (101 Yantra, 20 Shastra)	Precision steel/robotic instruments; laparoscopic and robotic platforms
Reconstructive technique	Pedicled cheek/forehead flap rhinoplasty	Free flaps with microvascular anastomosis; same core principle
Wound care	Honey, turmeric, ghee dressings; herbal fumigation	Sterile dressings, antibiotics, antiseptic solutions
Validated safety data	Limited modern clinical-trial evidence	Extensive randomised-trial and pharmacovigilance evidence
Post-operative infection control	Dhoopana fumigation; honey, turmeric, and neem dressings (emerging evidence)	WHO SSI-prevention care bundles; timed antibiotic prophylaxis; standardised aseptic dressing protocols

Table: Comparative summary across historical, pharmacological, and technical dimensions[3,8,15,21,23,25,39,42].

8. Integration and Current Research

India's Ministry of AYUSH has taken active steps toward integrating Ayurveda with mainstream biomedicine, including co-location of AYUSH facilities within allopathic hospitals, joint research protocols, and support for evidence generation on traditional therapies[27,34,35,36]. A concrete example is AIIMS New Delhi's Centre for Integrative Medicine and Research (CIMR), which conducts collaborative Ayurveda- and Yoga-based clinical research alongside contemporary medical departments, complemented by the newer AYUSH-ICMR Advanced Centres for Integrative Health Research established at AIIMS Delhi, Jodhpur, Nagpur, and Rishikesh[35,36]. The same integrative infrastructure extends to regional AYUSH-ICMR clinical-trial networks: government-supported multicentre trials on AYUSH formulations have included Rajendra Institute of Medical Sciences (RIMS), Ranchi as a participating study site, illustrating how tertiary teaching institutions beyond the metropolitan AYUSH-ICMR centres are being drawn into standardised, evidence-based AYUSH clinical research[36]. Within this framework, several strands of research bear directly on anaesthesia and surgery:

- **Pre-anaesthetic premedication trials:** herbs such as Vacha (*Acorus calamus*), Jatamansi, Brahmi, Mandukparni, and Shankhapushpi have undergone small clinical trials as pre-anaesthetic agents, assessed for their ability to reduce anxiety, potentiate modern anaesthetic agents, and lower required doses (and hence toxicity) of allopathic anaesthetics[3,20].
- **Post-operative pain and inflammation management:** Nirgundi, Rasna, Erandamoola, Bhringaraja, Parijata, Triphala Guggulu, and Shigru (*Moringa oleifera*) are studied as adjunctive anti-inflammatory analgesics in the post-operative period, intended to complement rather than replace standard analgesia[3,20].
- **Perioperative procedures with modern correlates:** Kshara Karma (alkaline cauterisation), Raktamokshana (therapeutic blood-letting/leech therapy), and Agnikarma (thermal cauterisation) continue to be studied for efficacy and clinical relevance alongside modern electrocautery and sclerotherapy techniques[11].
- **Preliminary exploratory findings:** isolated researchers have proposed that agents such as Sarpunkha and Tagara may hold spinal- and local-anaesthetic potential respectively, though these findings have not been independently replicated, standardised, or commercialised[17].

- **Novel polyherbal formulation research:** preclinical work on polyherbal local-anaesthetic formulations (for example, Injection Harsha 22) has shown analgesic activity comparable to lignocaine in animal models, though confirmatory human clinical trials remain pending[31].
- **Ayurgenomics and precision-medicine research:** translational work exploring Prakriti-based genomic correlates is being examined internationally as a way to personalise perioperative risk stratification and drug-response prediction[33].

Across this literature, a consistent and candid conclusion recurs: Ayurveda has not yet delivered a single herbo-mineral compound validated as a stand-alone general or regional surgical anaesthetic meeting modern efficacy and safety standards. Contemporary Ayurvedic surgeons (practitioners of modern Shalya Tantra) therefore continue to use allopathic anaesthetic agents for the operative phase itself, while drawing on Ayurvedic pharmacology for pre- and post-operative adjuncts[3,17,20,29]. Reviewers have called for systematic, standardised pharmacological and clinical-trial investigation of classical anaesthetic dravyas (substances) as the necessary next step toward validated integration[4,18].

8.1 Challenges to Integration

- Absence of standardised dosing, purity, and pharmacokinetic data for most classical agents.
- Limited large-scale randomised controlled trials; much of the literature consists of narrative reviews, case reports, and small observational studies.
- Interaction risk between herbal premedicants and modern anaesthetic/analgesic drugs, which current peri-operative guidelines address by recommending discontinuation of herbal medications before surgery — a recommendation some Ayurvedic researchers argue merits re-examination on an evidence-based, herb-by-herb basis rather than as a blanket policy[5,30,38].
- Regulatory pathways for herbo-mineral anaesthetic or analgesic formulations remain underdeveloped compared with those for synthetic pharmaceuticals.

9. Conclusion

The Ayurvedic surgical tradition, epitomised by Sushruta's Shalya Tantra and Sangyaharana, represents a genuinely early and sophisticated system of surgical technique, instrumentation, and pain management — one that anticipated the staged

pre-/intra-/post-operative framework, principles of asepsis, and reconstructive flap surgery that modern medicine would independently re-derive many centuries later. Modern anaesthesiology and surgery, however, remain categorically distinct in their pharmacological precision, physiological monitoring, and evidence base, built on receptor-level mechanistic understanding and rigorous clinical trials unavailable to ancient practitioners. Current integrative research — supported by India's Ministry of AYUSH and an active body of Ayurvedic pharmacology literature — is testing selected herbal premedicants and post-operative adjuncts against modern standards, but has not yet produced a validated Ayurvedic substitute for a modern surgical anaesthetic. The most productive path forward, as reflected across the reviewed literature, lies not in treating the two systems as competing alternatives but in rigorously evaluating specific Ayurvedic agents and perioperative principles as potential adjuncts within an evidence-based, integrative surgical care model.

10. Declarations

Author Contributions

Dr. Shafaque Kamran conceived the review, conducted the literature search, and wrote, reviewed, and approved the final manuscript in its entirety.

Conflicts of Interest

The author declares no conflicts of interest.

Funding

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Ethical Approval

Not applicable. This is a narrative literature review; it did not involve primary human or animal data collection.

Data Availability

All data supporting this review are derived from the publicly available sources cited in the reference list.

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❑

Role of *Triphala Kwath Prakshalan* During and After Laparoscopic Drainage of Liver Abscess: An Integrative Ayurvedic Approach

Dr. Alok Kumar Srivastava* Dr. Manoj Yadav**

Abstract

Liver abscess is a potentially serious intra-abdominal infection requiring timely diagnosis and appropriate antimicrobial therapy with drainage when indicated. Laparoscopic drainage provides effective source control in selected patients while postoperative wound care remains important for preventing local infection and promoting healing. Ayurveda describes inflammatory and suppurative conditions under the broader conceptual framework of *Vidradhi*, with emphasis on appropriate evacuation of pus, cleansing of the affected site and restoration of tissue healthy. *Triphala Kwath Prakshalan*- cleansing or irrigation using a decoction of *Triphala* may provide an integrative local wound care approach following surgical drainage.

Keywords: Liver Abscess, Laparoscopic Drainage, *Triphala Kwath Prakshalan*, Integrative Medicine, *Vidradhi*

Introduction

Liver abscess is a localized collection of infected material within hepatic parenchyma. It may be pyogenic, amoebic, fungal or of other etiology and its clinical presentations can be range from fever and abdominal pain to systemic toxicity and sepsis. Appropriate treatment generally requires antimicrobial therapy and where indicated, drainage of the abscess cavity. Minimally invasive control in appropriately selected patient.

Despite successful drainage, postoperative management remains essential. The operative site and drainage wounds require appropriate cleansing, monitoring and infection prevention. The management of surgical wound is particularly important in patients with ongoing contamination, discharge, inflammation or delayed tissue repair.

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Ayurveda provides a comprehensive framework for understanding inflammatory and suppurative condition. The condition *Vidhradhi* is described as a painful, inflammatory swelling that may progress through stages and eventually undergo suppuration. According to Sushruta Samhita the concept of *Yakrit Vidhradhi(*hepatic abscess) and *Prakshalana*(therapeutic irrigation) have been described in the management of supurative condition.

कषायैः शोधनं कार्यं शोधनैः द्रागुदीरितैः । अन्तःशल्यानणुमुखान् गम्भीरान् मांससंश्रितान् (Su.Sm. Chi.1/54)

Liver abscess can be correlated with *Yakrit Vidradhi* (Abhyantar Vidradhi - Adhisthan Vishesh) in Ayurveda.

The fruits of *Haritaki (Terminalia chebula*.), *Vibhitaki (Terminalia* bellirica), and *Amalaki* (*Phyllanthus emblica*) are combined to make *Triphala,* a traditional Ayurvedic remedy. Traditionally, it has been said to have healing, balancing, and purifying qualities. *Triphala Kwath Prakshalan* may be regarded as an adjunctive procedure in certain wound-care settings when prepared as a decoction and used for local cleansing under suitable clinical supervision.

The present case described the integrative management of a 39 year old male with liver abscess who underwent laparoscopic drainage and received during and after *Triphala Kwath Prakshalan* and radiological recovery.

Case Report

Patient Information

A 39-year-old male presented with complaints of pain in the upper abdomen, predominantly in the epigastric region, intermittent fever, loss of appetite (anorexia), and generalized weakness for the past four months. On admission, the patient's general condition was stable, and there was no significant past medical or surgical history. Clinical examination, laboratory investigations, and radiological imaging confirmed the diagnosis of a liver abscess. After thorough evaluation, the patient underwent laparoscopic drainage of the liver abscess. As an adjunct to standard surgical and postoperative management, ***Triphala Kwath Prakshalan*** was performed for local wound irrigation and postoperative wound care as part of an integrative Ayurvedic approach.

Investigations

Table1. Baseline Laboratory Investigations (28 April 2026)

Investigation	Result	Interpretation
Hemoglobin	12.7 g/dL	Normal
Total Leukocyte Count	19,200/cu.mm	Increased
Platelet Count	1.61 lakh/cu.mm	Normal
Total Bilirubin	1.1 mg/dL	Normal
SGPT (ALT)	1482 IU/L	Markedly Increased
SGOT (AST)	841.6 IU/L	Markedly Increased
Total Protein	5.86 g/dL	Decreased
Serum Albumin	3.23 g/dL	Decreased
Kidney Function Test	Within Normal Limits	Normal
HBsAg	Non-reactive	Negative
Anti-HCV	Non-reactive	Negative
HIV I & II	Non-reactive	Negative

Table2. Personal History

Parameter	Findings
Diet	Mixed
Appetite	Decreased
Bowel Habits	Satisfactory
Sleep	Disturbed
Addiction	Alcohol consumption

Table3. Radiological Findings

Investigation	Findings
Ultrasonography (27 April 2026)	Partially liquefied liver abscess involving the caudate lobe with an estimated volume of **115 cc**.

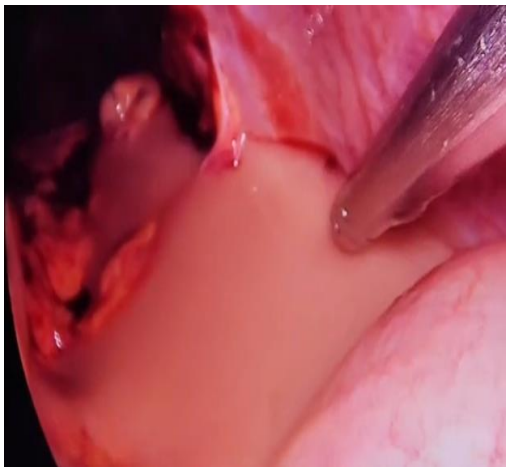
Therapeutic Intervention

The patient underwent laparoscopic drainage of liver abscess under appropriate anesthesia and surgical precautions.

The procedure involved:

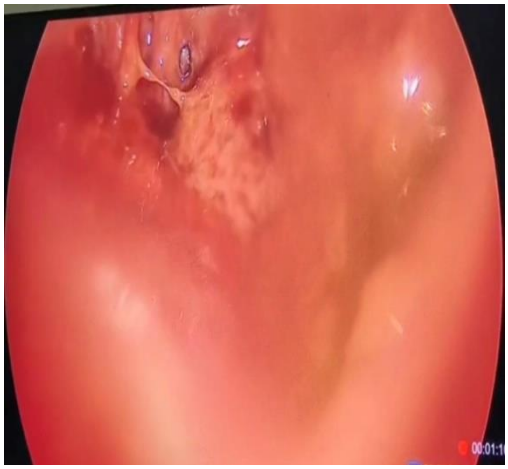
1. Identification of the abscess cavity
2. Controlled drainage of the purulent collection
3. Irrigation and clearance of abscess cavity with *Triphala Kwath*

4. Placement of a drain where clinically indicated and for further clearance of cavity by *Triphala Kwath*
5. Postoperative monitoring and standard medical management.
   The patient received standard postoperative treatment including
   - Appropriate antimicrobial therapy as indicated
   - Fluid and nutritional support
   - Monitoring of vital signs and systemic infection
   - Drain management and assessment of discharge
   - Routine postoperative wound care
   - Postoperative irrigation of abscess cavity by *Triphala Kwath* for seven day two times in a day.



Laparoscopic Drainage of Pus

Triphala Kwath



Triphala Kwath Prakshalana

Drain inside Cavity

Ayurvedic Intervention: *Triphala Kwath Prakshalan*

Triphala Kwath possesses Shothahara (anti-inflmmatory), Shodhan (wound cleansing), Ropana (wound healing) and antimicrobial supportive properties.

Triphala is a classical combination of three medicinal fruits. Traditionally, the three ingredients are considered to possess complementary properties.

Haritaki

Haritaki is traditionally described as having cleansing and balancing properties. It is widely used in Ayurvedic formulations directed toward elimination, digestion, and tissue support.

Vibhitaki

Vibhitaki is traditionally used in formulations associated with cleansing and tissue support. Its inclusion in Triphala contributes to the combined therapeutic profile of the formulation.

Amalaki

Amalaki is traditionally regarded as a rejuvenative and tissue-supportive drug. It is also valued for its antioxidant potential and its role in maintaining tissue health.

The combined use of these three drugs forms the basis of Triphala. In the context of local wound care, the decoction may theoretically contribute to cleansing and maintenance of the local wound environment.

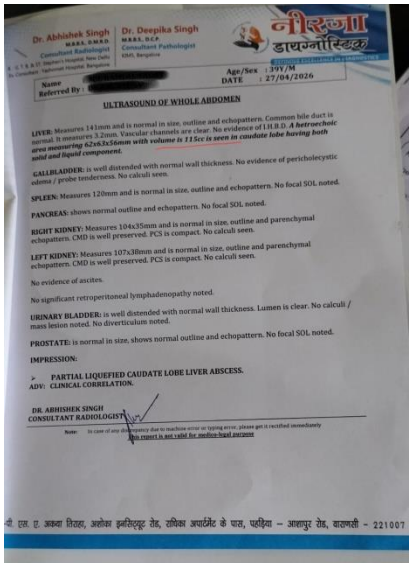
However, the present case report does not establish the specific mechanism by which Triphala Kwath may have contributed to the patient's recovery. The complete outcome must be interpreted in the context of combined treatment, including surgical drainage, antimicrobial therapy, and routine postoperative care.

Preparation of Triphala Kwath

In the present case, ***Triphala Kwath*** was prepared freshly in-house under aseptic conditions. A total of **250 g of coarse *Triphala* powder (Kashaya Churna)** was mixed with **1 L of potable water** and boiled over a high flame until the volume was reduced to approximately **250 mL.** The decoction was then filtered through a sterile muslin cloth to remove particulate matter and allowed to cool to **body temperature (approximately 37°C).** The prepared Triphala Kwath was subsequently drawn into a sterile syringe and used for irrigation (*Prakshalan*) of the postoperative drainage site under aseptic precautions.

Outcome and Follow up

During the follow-up period, the patient showed progressive clinical improvement with complete resolution of presenting symptoms. No significant postoperative complications or adverse events were observed. Follow-up radiological evaluation demonstrated healthy healing of the abscess cavity without evidence of residual collection or recurrence. The patient's overall clinical condition remained stable, and he continued to do well at the one-month follow-up visit.



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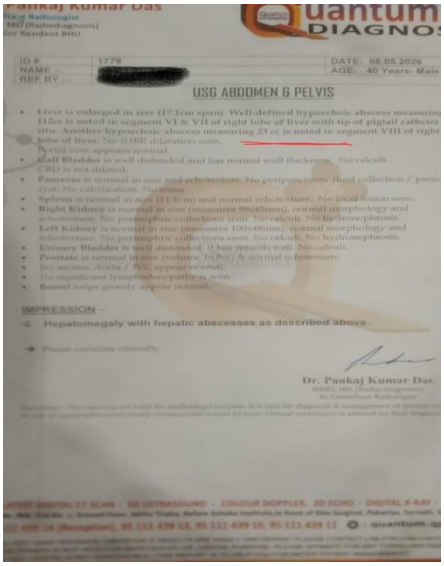

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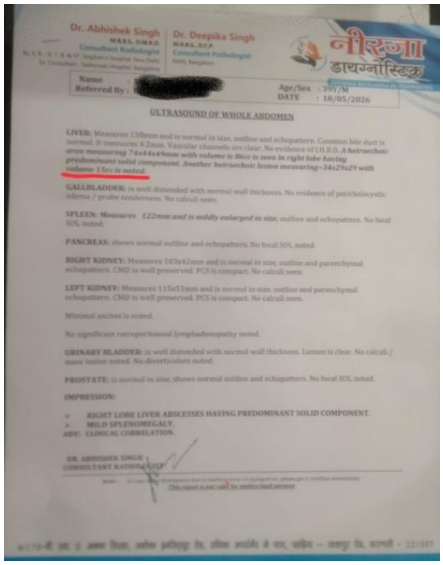

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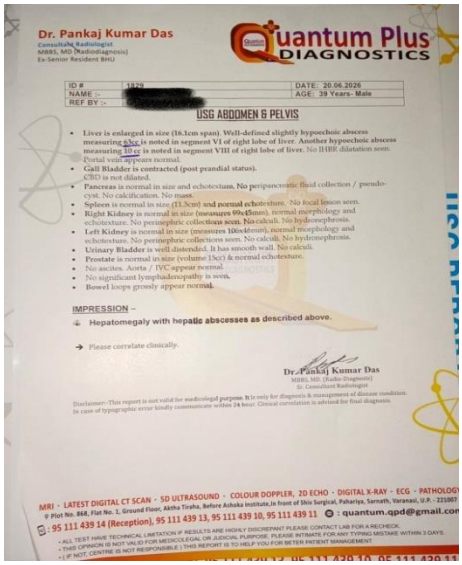

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Discussion

Clinical Significance

Liver abscess is a potentially life-threatening condition that requires timely diagnosis, effective source control, and appropriate antimicrobial therapy to prevent serious complications. In the present case, successful management was achieved through an integrative approach combining laparoscopic surgical drainage with ***Triphala Kwath Prakshalan*** as an adjunctive postoperative cavity irrigation procedure. This case demonstrates the feasibility of incorporating an Ayurvedic local therapeutic intervention alongside standard surgical management without compromising patient safety.

Comparison with Existing Literature

The current standard management of liver abscess includes systemic antibiotic therapy along with image-guided or surgical drainage, depending on the size, location, and complexity of the abscess. While the use of minimally invasive laparoscopic drainage is well established, there is limited published literature regarding the use of Ayurvedic intracavitary irrigation following laparoscopic drainage of a liver abscess. The present case contributes to the growing body of evidence supporting an integrative approach by demonstrating favorable clinical and radiological outcomes without any treatment-related adverse events.

Treatment Rationale and Mechanism of Action

Laparoscopic drainage provides effective evacuation of the purulent collection and establishes adequate source control, which is the cornerstone of liver abscess management. Following drainage, ***Triphala Kwath Prakshalan*** was used as an adjunctive irrigation therapy. Triphala, a classical Ayurvedic formulation consisting of *Haritaki* (*Terminalia chebula*), *Vibhitaki* (*Terminalia bellirica*), and *Amalaki* (*Phyllanthus emblica*), is traditionally described as possessing *Shodhana* (cleansing) and *Ropana* (wound-healing) properties. Local irrigation with Triphala Kwath may help reduce the local microbial burden, facilitate the removal of necrotic debris, and create a favorable environment for tissue repair. In addition, the documented antimicrobial, anti-inflammatory, antioxidant, and wound-healing properties of Triphala may contribute to healthy granulation tissue formation and accelerated cavity healing. However, these potential benefits should be considered supportive, as the successful outcome in this case resulted from comprehensive multidisciplinary management, including surgical

drainage and systemic antibiotic therapy.

Clinical Outcome

The patient demonstrated progressive clinical improvement following the procedure, with complete resolution of fever, abdominal pain, and constitutional symptoms. Laboratory investigations showed a significant reduction in inflammatory parameters during follow-up. No postoperative complications or treatment-related adverse events were observed. Follow-up radiological evaluation confirmed healthy healing of the abscess cavity without evidence of residual collection or recurrence. The patient remained clinically stable throughout the one-month follow-up period and experienced an uneventful recovery with a relatively short hospital stay.

Learning Points

This case highlights that an integrative management strategy combining laparoscopic drainage with ***Triphala Kwath Prakshalan*** is feasible and appeared safe in this patient. The use of *Triphala Kwath* as an adjunctive postoperative irrigation procedure may support local wound and cavity healing following surgical drainage. Nevertheless, the findings of a single case report cannot establish efficacy or causality. Well-designed prospective studies and randomized controlled trials are required to evaluate the safety, effectiveness, and standardization of this integrative therapeutic approach in the management of liver abscess.

Conclusion

Laparoscopic drainage combined with ***Triphala Kwath Prakshalana*** yielded encouraging clinical outcomes in the present case, suggesting that this integrative approach may serve as a promising adjunct in the management of liver abscess. The patient achieved complete clinical recovery without any postoperative complications or recurrence during the one-month follow-up period. The successful outcome indicates that the integration of Ayurvedic therapy with modern surgical management has the potential to enhance postoperative healing and recovery while adhering to established principles of surgical care. Although ultrasound-guided pigtail catheter drainage remains the preferred minimally invasive intervention in many cases, laparoscopic drainage offers distinct advantages in selected patients, particularly those with multiloculated, large, or difficult-to-access abscesses. However, laparoscopic drainage is still underutilized and should be encouraged in appropriately selected cases where surgical expertise and facilities are available. Careful attention should be paid to

achieving meticulous hemostasis during the procedure, and preoperative coagulation status, including prothrombin time (PT) and international normalized ratio (INR), should be assessed to minimize the risk of perioperative bleeding. As this report represents a single case, larger prospective studies and randomized controlled trials are warranted to establish the safety, efficacy, and standardization of *Triphala Kwath Prakshalana* as an adjunct to laparoscopic drainage in the management of liver abscess.

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Case Report: Anaesthetic Management of a 45-Year-Old Male with Squamous Cell Carcinoma of the Left Lateral Border of the Tongue

Dr. Vineet Mishra[*]

Abstract: Carcinoma of the tongue presents unique challenges to the Anaesthesiologist, primarily centred around airway management, shared airway dynamics, and hemodynamic stability. We report the anaesthetic management of a 45-year-old male with moderately differentiated squamous cell carcinoma of the left lateral border of the tongue scheduled for wide local excision (partial hemiglossectomy), ipsilateral selective neck dissection, marginal mandibulectomy and radial forearm flap reconstruction. The primary anaesthetic focus was securing a difficult airway via awake fibreoptic intubation (FOI), managing a shared intraoperative surgical field, and managing acute postoperative pain while ensuring a smooth emergence to protect the surgical site. [1]

Key words: hemodynamic stability, mandibulectomy, transtracheal route, fibreoptic.

Case Presentation:

1. Preoperative Evaluation and Preparation

- **Patient Profile:** A 45-year-old male, weighing 68 kg, presenting with an ulcer proliferative mass on the left lateral border of the tongue.
- **Airway Examination:** Modified Mallampati Class III, thyromental distance of 6.2 cm, and adequate mouth opening (inter-incisor distance of 3.5 cm). The tongue lesion was tender, friable, and restricted full lateral protrusion of the tongue. No structural shifting of the larynx or trachea was noted on the neck radiograph or CT scan. [2]
- **Systemic Review:** Cardiovascular and respiratory systems were within normal parameters. Preoperative laboratory investigations, including complete blood count, coagulation profile, and renal and liver function tests, were within normal limits.
- **Premedication:** The patient was kept *Nil per oral* (NPO) for 8 hours. Glycopyrrolate 0.2 mg was administered intramuscularly 45 minutes before surgery

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to minimize oral secretions and optimize the visual field for fibre optic bronchoscopy.

2. Airway Management and Induction

An awake nasal fibre optic intubation was planned due to the risk of tumour friability, bleeding, and potential airway distortion during conventional laryngoscopy.

- **Airway Preparation:** The nasal mucosa was prepared with 4% xylocaine drops mixed with 0.05% oxymetazoline for vasoconstriction. The oral cavity and posterior pharyngeal wall were topicalized using 10% lignocaine spray. A superior laryngeal nerve block was performed bilaterally using 2 mL of 2% lignocaine, and an airway block via the transtracheal route (4 mL of 2% lignocaine) was executed to suppress the cough reflex.
- **Procedure:** Under conscious sedation with a titrated intravenous infusion of dexmedetomidine 50 mcg over 10 minutes, a flexible fibreoptic bronchoscope was introduced through the right nostril. The vocal cords were visualized, and a size 7.0 mm cuffed armoured endotracheal tube was smoothly advanced into the trachea. Tube placement was confirmed via waveform capnography and bilateral chest auscultation.
- **Induction & Maintenance:** General anaesthesia was induced with propofol 120 mg and fentanyl 50 mg. Vecuronium 6 mg was administered to facilitate muscle relaxation once the airway was definitively secured. Maintenance was achieved using sevoflurane in an oxygen-nitrous oxide mixture (50:50) and intermittent doses of vecuronium.

3. Intraoperative Management

- **Monitoring:** Standard American Society of Anaesthesiologists (ASA) monitoring was utilized, including ECG, non-invasive blood pressure, pulse oximetry (SpO2), end-tidal carbon dioxide (EtCO2), and temperature. Invasive arterial blood pressure was monitored via the right radial artery for beat-to-beat hemodynamic mapping and arterial blood gas (ABG) sampling.
- **Surgical Challenges:** A throat pack was placed to prevent blood and surgical debris from draining into the stomach or tracking down the trachea. Close communication was maintained with the surgical team to avoid accidental circuit disconnection or tube displacement during tongue manipulation and neck dissection.

- **Fluid Management:** Fluid balance was maintained using balanced salt solutions to avoid fluid overload, which could aggravate tissue edema at the surgical site. Total blood loss was estimated at 350 mL and replaced appropriately.

4. Postoperative Extubation and Analgesia

- **Emergence:** At the conclusion of the 4-hour surgery, the throat pack was removed, and thorough, gentle upper airway suctioning was performed under direct vision to clear residual blood.
- **Analgesia & Antiemesis:** Multimodal analgesia was provided using paracetamol 1 g intravenously every 8 hours, combined with an ultrasound-guided bilateral superficial cervical plexus block using 0.25% bupivacaine for the neck dissection site. Ondansetron 4 mg was administered intravenously to prevent postoperative nausea and vomiting (PONV).
- **Extubation:** Neuromuscular blockade was reversed using neostigmine 2.5 mg and glycopyrrolate 0.5 mg. Once the patient was fully awake, obeying commands, and displaying adequate airway reflexes and respiratory muscle power, he was extubated in a sitting position to reduce upper airway oedema. He was transferred to the High Dependency Unit (HDU) for close observation.
- After 2weeks all sutures are removed, 18 No Nasogastric tube placed for feeding and discharged with advice to follow up with radiation oncologist for concurrent chemoradiation. Patient is doing well after complete treatment.

Anaesthetic Implications for Head and Neck Oncosurgery

When preparing this case report for submission to an Indian journal, the discussion must emphasize the specific anaesthetic considerations associated with head and neck oncology within this demographic:

1. The Anticipated Difficult Airway [3]

Carcinoma of the lateral border of the tongue can significantly impair tongue mobility, leading to limited submandibular compliance and distortion of the airway anatomy. Conventional direct laryngoscopy risks tumour tissue trauma, inducing severe bleeding, tumour fragmentation, or laryngospasm. Awake fibreoptic intubation remains the gold standard choice. Anaesthesiologists practicing in resource-constrained or rural Indian settings must also be adept at alternative backup plans, including video laryngoscopy or a primary surgical tracheostomy under local anaesthesia if fibreoptic

technology is unavailable. [4]

2. Shared Airway and Tube Safety

The surgical field is completely shared between the surgeon and the anaesthesiologist.

- **Armoured (Flexo metallic) Tubes:** Essential to prevent kinking or compression when surgical retractors (such as a Boyle-Davis or Jennings mouth gag) are applied to optimize oral exposure.
- **Securing the Tube:** The nasal endotracheal tube must be anchored securely to prevent accidental extubation or migration during radical neck positioning (hyperextension and lateral rotation).

3. Cardiovascular Reflexes during Neck Dissection

Surgical dissection around the carotid triangle (Level II and III lymph nodes) carries a high risk of stimulating the **carotid sinus**. This mechanical manipulation can trigger sudden, severe bradycardia, arrhythmias, or profound hypotension.

The anaesthesiologist must maintain high vigilance during this surgical phase. Treatment involves immediately alerting the surgeon to halt manipulation, ensuring adequate anaesthetic depth, and administering intravenous atropine (0.6 mg) if the reflex bradycardia persists.

4. Postoperative oedema and Airway Protection

Extensive surgical manipulation of the tongue, combined with standard radical neck lymphatic clearance, impairs local venous and lymphatic drainage. This leads to rapid, progressive postoperative tissue oedema of the floor of the mouth and larynx.

- **Extubation Criteria:** Extubation must be deferred until the patient is fully awake, exhibits excellent airway reflexes, and has met strict respiratory criteria.
- **Positioning:** Keeping the patient in a propped-up or semi-Fowler’s position postoperatively minimizes gravitational tissue edema.
- **Emergency Readiness:** A difficult airway cart, including fresh laryngoscopes, supraglottic airway devices, and a tracheostomy set, must remain at the patient's bedside during the immediate postoperative period.

5. Co-morbidities and Demographics in the Indian Context

In India, oral malignancies are strongly associated with habits such as commercial cigarette smoking, *bidi* smoking, and the use of smokeless tobacco variants like *gutka* or *khaini*. Patients often present with concurrent chronic obstructive pulmonary disease (COPD), chronic bronchitis, or varying degrees of oral submucous fibrosis (OSMF), which further narrows the inter-incisor gap. Preoperative optimization must include chest physiotherapy, bronchodilator therapy, and strict lifestyle cessation counselling. [5, 6, 7]

Conclusion

The anaesthetic management of oral tongue carcinoma depends on meticulous airway planning, structured systemic monitoring, and anticipating sudden autonomic reflexes during surgical dissection. Utilizing awake fibreoptic nasal intubation ensures airway control without disrupting the structural integrity of a friable tumour, while a planned, smooth emergence in a controlled environment mitigates the risks of acute airway obstruction.

Key Learning Points

- **Anticipate Airway Traumas:** Avoid force-induced direct laryngoscopy on friable tongue ulcers; favor awake fibreoptic or video-assisted options.
- **Manage Reflexes:** Be prepared for sudden vagal bradycardia during level II/III cervical lymph node clearance.
- **Plan the Emergence:** Postoperative local tissue oedema can cause rapid airway failure; execute extubation only when the patient is fully awake and sitting upright.

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Consideration of safety during Sangyaharan practice for surgeries on Asthi -Roga patients

Dr. Devendra Nath Pande✶

Abstract:

Many surgical conditions of Bhagna (fractures and dislocations) are mentioned in Sushrut Samhita[1]. A very good description and concept is wisely contributed to the entire world first time[2]. He mentioned that it was caused by trauma of different origin. [3]

Acharya Sushruta divided Bhagna into two types[4] -Sandhimukta (Dislocations) and Kand Bhagna (Bone Fractures). It refers to fractures and dislocations caused by trauma. It`s detailed description is mentioned in Nidanasthana Chapter 15 and Chikitsasthana Chapter 3. It was mentioned first time, the fundamental principles of traction, manipulation, alignment, and immobilization for the management of *Kandabhagna* (bone fractures) and *Sandhimoksha* (joint dislocations) which are used in orthopaedics practices still today.

Kandabhagna (Bone Fractures): Divided into 12 types based on the shape and pattern of the break, such as *Kati* (transverse), *Vakra* (oblique), *Challita* (fissured) and *Splutita* (splintered).

Sandhimoksha (Dislocations): was divided into 6 types of joint displacements[5] depending on the direction and nature of the dislodgement.

The basic Treatment Principles of Bhagna Chikitsa[6] is mentioned as

Anchhana (Traction), Pulling the limb to stretch and align overlapping or shortened bone fragments.

Pidana (Manipulation): Applying localized manual pressure to depress raised fragments or elevate depressed ones.

Sankshepa (Apposition): Bringing separated or displaced ends into precise contact.

Bandhana (Immobilization): Securing the reduced fracture using splints (*Kushabandha*) and medicated pastes (*Lepa*).

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He further mentioned surgical approach[7] also. Keeping in view the present scenario of management in Ayurvedic surgery, Sangyaharan (anaesthesia) plays a great role to make the procedure painless. Therefore in this article it is mentioned about the different safety issues and plan of Sangyaharan to be fallowed for the management of surgical procedure for Asthi Bhagna.

KeyWords: Sandhimukta, *Kandabhagna*, Anchhana, Pidana, poikilothermic.

Many orthopedic surgical procedures are performed under regional anesthesia.

Anesthesia for orthopedic surgery requires[8]:

- well known to the special positioning requirements (risk of peripheral nerve injury),
- to the possibility of large intraoperative blood loss and techniques to limit the impact of this occurrence (intraoperative hypotension, salvage techniques).
- the risk of venous thromboembolism (emphasizing the need for the anesthesiologist to consider the interaction of anticoagulants and antiplatelet drugs with anesthetic drugs or techniques, especially regional anesthesia).
- a brief neurologic examination with documentation of any pre-existing deficits is recommended.

Pre-Existing Medical Problems:

- Coronary artery disease (perioperative β blockade should be considered)
- Rheumatoid arthritis (steroid therapy, airway management)

Physical Examination:

- Mouth opening or neck extension
- Evidence of infection and anatomic abnormalities at proposed sites for introduction of regional anesthesia.

Peripheral techniques may be acceptable if a regional technique is contraindicated.

-Arthritic changes and limitations to positioning.

Choice of Anesthetic Technique:

Advantages of Regional anesthesia technique versus General Anesthesia for Orthopedic Surgical Procedures:

1. Postoperative adequate analgesia.

2. Decreased incidence of nausea and vomiting.
3. Less respiratory and cardiac depression.
4. Improved perfusion because of sympathetic nervous system block.
5. Decreased intraoperative blood loss.
6. Decreased blood pressure.
7. Blood flow redistribution to large caliber vessels.
8. Locally decreased venous pressure.

Note: Spinal cord injuries must be considered in any patient who has experienced trauma. Cervical spine injuries are associated with head and thoracic injuries and lumbar spine injuries are associated with abdominal injuries and long bone fractures.

Consideration of Tracheal Intubation[9]:

- Airway management is critical because the most common cause of death with acute cervical spinal cord injury is respiratory failure.
- All patients with severe trauma or head injuries should be assumed to have an unstable cervical fracture until proven otherwise radiographically.
- Awake fiberoptic-assisted intubation may be necessary, with general anesthesia induced only after voluntary upper and lower extremity movement is confirmed.

In a truly emergent situation, oral intubation of the trachea with direct laryngoscopy (minimal flexion or extension of the neck) is the usual approach.

Respiratory considerations:

Respiratory considerations include an inability to cough and clear secretions, which may result in atelectasis and infection.

Cardiovascular considerations:

Cardiovascular considerations are based on loss of sympathetic nervous system innervation ("spinal shock") below the level of spinal cord transection. (Cardioaccelerator fiber [T1–T4] loss results in bradycardia and possible absence of compensatory tachycardia if blood loss occurs.)

Succinylcholine-Induced Hyperkalemia[10]:

Succinylcholine-Induced Hyperkalemia It is usually safe to administer

succinylcholine (Sch) within the first 48 hours after spinal cord injury. It should be avoided after 48 hours in all patients with spinal cord injuries.

Temperature Control:

Loss of vasoconstriction below the level of spinal cord transection causes patients to become poikilothermic. (Body temperature should be maintained by increasing ambient air temperature and warming intravenous [IV] fluids and inhaled gases).

Maintaining Spinal Cord Integrity:

An important component of anesthetic management is preservation of spinal cord blood flow. (Perfusion pressure should be maintained, and extreme hyperventilation of the lungs should be avoided.) Neurophysiologic monitoring (somatosensory or motor evoked potentials), a "wake-up test," or both are used to recognize neurologic ischemia before it becomes irreversible.

Autonomic Hyperreflexia:

1. Occurs in 85% of patients with spinal cord transection above T5
2. Paroxysmal hypertension with bradycardia (baroreceptor reflex)
3. Cardiac dysrhythmias
4. Cutaneous vasoconstriction below and vasodilation above the level of transection
5. Precipitated by any noxious stimulus (distention of a hollow viscus)

Treatment is removal of stimulus, deepening of anesthesia, and administration of a vasodilator.

Pulmonary Considerations:

Postoperative ventilation of the patient's lungs is likely to be necessary if the vital capacity is below 40% of the predicted value. Prolonged arterial hypoxemia, hypercapnia, and pulmonary vascular constriction may result in right ventricular hypertrophy and irreversible pulmonary hypertension.

Cardiovascular Considerations:

Prolonged alveolar hypoxia caused by hypoventilation and ventilation/ perfusion mismatch eventually causes irreversible vasoconstriction and pulmonary hypertension.

Surgical Approach and Positioning:

The prone position is used for the posterior approach to the spine. (The hazards of the prone position, including brachial plexus stretch injury [the head should be rotated toward the abducted arm and the eyes taped closed], should be considered.

The anterior approach is achieved with the patient in the lateral position, usually with the convexity of the curve uppermost. Removal of a rib may be necessary. A double-lumen endotracheal tube is used to collapse the lung on the operative side.

A combined anterior and posterior approach in one or two stages yields higher union rates but is associated with increased morbidity, including blood loss and nutritional deficits.

Anesthetic Management:

Respiratory reserve is assessed by exercise tolerance, vital capacity measurement, and arterial blood gas analysis. Autologous blood donation is often recommended (usually ≥4 U can be collected in the month before surgery).

There are specific anesthetic considerations for surgical correction of scoliosis by spinal fusion and instrumentation.

Anesthetic Considerations for Surgical Correction of Scoliosis:

1. Management of the prone position
2. Hypothermia (long procedure and extensive exposed area)
3. Extensive blood and fluid losses
4. Maintenance of spinal cord integrity
5. Prevention and treatment of venous air embolism

Reduction of blood loss through hypotensive anesthetic techniques.

Adequate hemodynamic monitoring and venous access are essential in the management of patients undergoing spinal fusion and instrumentation.

Monitoring for Patients Undergoing Scoliosis Surgery[11]:

1. Cannulation of radial artery (direct blood pressure measurement and assessment of blood gases)
2. Central venous catheter (evaluates blood and fluid management and aspirate air if

venous air embolism occurs)

3. Pulmonary artery catheter (pulmonary hypertension)

Neurophysiologic monitoring (prompt diagnosis of neurologic changes and early intervention) Somatosensory evoked potentials Motor evoked potentials Wake-up test.

Spinal stenosis, spondylosis, and spondylolisthesis are forms of degenerative vertebral column disease that may lead to neurologic deficits necessitating surgical intervention.

Surgical Approach and Positioning:

Cervical laminectomy is most often performed with patients in the prone position . Prone position with the patient's head turned and the dependent ear and eye protected from pressure. Chest rolls are in place, the arms are extended forward without hyperextension, and the knees are flexed.

Fiberoptic-assisted intubation may be necessary in patients with severely limited cervical movement.

The anterior approach places the surgical incision (anterior border of the sternocleidomastoid muscle) near critical structures (carotid artery, esophagus, trachea [edema and recurrent nerve injury are possible]).

The use of the sitting position for cervical laminectomy allows a more blood-free surgical field but introduces the risk of venous air embolism. The incidence is less than for sitting posterior fossa craniotomy, but the patient still needs to be monitored with precordial Doppler.

Anesthetic Management:

General anesthesia is most often selected for spinal surgery because it ensures airway access and is acceptable for prolonged operations. Patients undergoing cervical laminectomy should be assessed preoperatively for cervical range of motion and the presence of neurologic symptoms during flexion, extension, and rotation of the head. (Awake fiberoptic intubation of the trachea may be necessary.)

Sch should be avoided if there is evidence of a progressive neurologic deficit.

Spinal Cord Monitoring: Paraplegia is a feared complication of major spine surgery. The incidence of neurologic injuries associated with scoliosis correction is 1.2%. When patients awaken with paraplegia, neurologic recovery is unlikely, although immediate

removal of instrumentation improves the prognosis.

It is therefore essential that any intraoperative compromise of spinal cord function be detected as early as possible and reversed immediately. The two methods for detecting intraoperative compromise of spinal cord function are the "wake-up test" and neurophysiologic monitoring.

wake-up:

The wake-up test consists of intraoperative awakening of patients after completion of spinal instrumentation. Surgical anesthesia (often including opioids) and neuromuscular blockers are allowed to dissipate, and the patient is asked to move the hands and feet before anesthesia is re-established. Recall may occur but is rarely viewed as unpleasant, especially if the patient is fully informed before surgery.

Neurophysiologic monitoring[12]:

- Neurophysiologic monitoring (as an adjunct or an alternative to the wake-up test) includes :
- Somatosensory evoked potentials (SSEPs) (waveforms may be altered by volatile anesthetics, hypotension, hypothermia, hypercarbia),
- Motor evoked potentials (MEPs) (neuromuscular blocking drugs cannot be used), Electromyography.

SSEPs reflect the dorsal columns of the spinal cord (proprioception and vibration) supplied by the posterior spinal artery.

- MEPs reflect the motor pathways and the portion of the spinal cord supplied by the anterior spinal artery.

The combined use of SSEPs and MEPs may increase the early detection of intraoperative spinal cord ischemia.

If both SSEPs and MEPs are to be monitored during major spine surgery, one might consider providing anesthesia with an ultrashort-acting opioid infusion with a low dose of inhaled anesthetic and monitoring the electroencephalogram to minimize the potential for intraoperative awareness.

Blood Loss[13]:

- A combination of IV hypotensive agents and volatile anesthetics is frequently used in an attempt to decrease blood loss during surgery.

Perioperative coagulopathy from dilution of coagulation factors, platelets, or fibrinolysis may be predicted from measurement of either the prothrombin time or activated partial thromboplastin time.

Visual Loss After Spine Surgery[14]:

Most cases are associated with complex instrumented fusions often associated with prolonged intraoperative hypotension, anemia, large intraoperative blood loss, and prolonged surgery.

The American Society of Anesthesiologists' Closed Claims Registry concludes that patients at high risk for postoperative visual loss after major spine surgery are those in whom blood loss is 1000 mL or greater or undergoing surgery lasting 6 hours or longer.

Venous Air Embolus[15]:

Venous air embolism can occur in all positions used for laminectomies because the operative site is above the heart level. Presenting signs are usually unexplained hypotension and an increase in the end-tidal nitrogen concentration.

Postoperative Care:

1. Most patients' tracheas can be extubated immediately after posterior spinal fusion operations if the procedure was relatively uneventful and preoperative vital capacity values were acceptable. The presence of severe facial edema may prevent prompt tracheal extubation.
2. Aggressive postoperative pulmonary care, including incentive spirometry, is necessary to avoid atelectasis and pneumonia.

Continued hemorrhage in the postoperative period is a concern.

Epidural and Spinal Anesthesia After Major Spine Surgery:

Postoperative anatomic changes make needle or catheter placement more difficult after major spine surgery.

Changes After Major Spine Surgery That May Influence the Ability to Perform Epidural or Spinal Anesthesia:

1. Degenerative changes (spondylothesis below level of fusion) that increase the chance of spinal cord ischemia and neurologic complications with regional anesthesia

2. Ligamentum flavum injury from prior surgery results in adhesions and possible obliteration of the epidural space or interference with spread of local anesthetic solution ("patchy block")
3. 3.Increased incidence of accidental dural puncture if the epidural space is altered by prior surgery (blood patch is difficult to perform if needed)
4. Prior bone grafting or fusion may prevent midline insertion of the needle.

Spinal anesthesia may be a more reliable technique than epidural anesthesia if a regional technique is selected.

The presence of postoperative spinal stenosis or other degenerative changes in the spine or pre-existing neurologic symptoms may preclude the use of regional anesthesia in these patients.

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Yoga and Ayurvedic Lifestyle Practices for Sleep, Stress Management and Psychological Well-being: A Literature-Based Review

Mohit Kumar*, Dr. Ramesh Chandra, Dr. R.K. Jaiswal*****

Abstract

Background. Disturbed sleep, chronic psychological stress and diminished well-being have become interlinked features of contemporary lifestyles, and interest in behavioural, non-pharmacological approaches has grown accordingly. Yoga and Ayurvedic lifestyle practices are widely promoted for these concerns, but the evidence supporting each differs markedly in quality.

Objective. To synthesise published literature on Yoga and Ayurvedic lifestyle practices in relation to sleep, stress and psychological well-being, and to distinguish established evidence from traditional concepts and proposed mechanisms.

Method. This is a literature-based narrative review. PubMed/MEDLINE, Scopus, Web of Science, ScienceDirect, the Cochrane Library and AYUSH-related sources were searched for systematic reviews, meta-analyses, randomised controlled trials and observational studies. Classical Ayurvedic texts were consulted to define concepts, not to evidence effects.

Findings. Meta-analytic evidence supports modest improvements in sleep quality and reductions in perceived stress and elevated anxiety following Yoga, together with a shift in autonomic balance toward parasympathetic predominance. Yoga Nidra shows the most specific sleep evidence, including objective polysomnographic change. Evidence for Ayurvedic lifestyle concepts such as *Dinacharya*, *Nidra*, *Ahara* and *Sadvritta* remains largely conceptual, though individual procedures such as *Shirodhara* have preliminary controlled support.

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Research gap. Almost no studies evaluate Yoga and Ayurvedic lifestyle as an integrated protocol, and standardised Ayurvedic lifestyle interventions are lacking.

Conclusion. Yoga may contribute meaningfully to sleep and stress management; Ayurvedic lifestyle practices offer a coherent behavioural framework whose independent effects require investigation.

Keywords: Yoga; Ayurveda; *Dinacharya*; sleep quality; psychological stress; psychological well-being; lifestyle intervention

1. Introduction

Contemporary living has generated a distinctive cluster of health challenges. Sedentary occupations, extended screen exposure, irregular meal and sleep timing, competitive academic and workplace environments, and continuous digital connectivity have combined to disturb the behavioural rhythms on which physiological regulation depends. Non-communicable disease burden has risen alongside these changes, and increasingly the proximate drivers are behavioural rather than infectious or genetic.

Sleep has been among the most visible casualties. Insufficient duration, delayed timing and fragmented sleep are now common across age groups and are no longer confined to clinical insomnia populations. Consequences extend beyond daytime sleepiness to impaired attention and working memory, emotional dysregulation, metabolic disturbance and reduced quality of life. Sleep quality is most commonly assessed with the Pittsburgh Sleep Quality Index (Buysse et al., 1989) and insomnia severity with the Insomnia Severity Index, whose divergence in trial results, discussed below, has interpretive consequences.

Psychological stress is the second element. Stress is best understood as a three-part process comprising the stressor, the physiological response, and the appraisal that demands exceed available resources (Lazarus & Folkman, 1984). The response is adaptive; pathology arises when activation is excessive, prolonged or fails to terminate, producing the cumulative cost McEwen (1998) termed *allostatic load*. The principal effectors are the sympathetic–adrenomedullary axis and the hypothalamic–pituitary–adrenal (HPA) axis (Chrousos, 2009). Vagally mediated heart-rate variability (HRV) indexes the counter-regulatory capacity opposing both (Task Force, 1996) and is linked to prefrontal control over subcortical threat circuitry (Thayer & Lane, 2000).

Anxiety and other emotional difficulties frequently accompany both. Importantly, the relationships among sleep, stress and mental health are bidirectional

rather than linear. Stress delays sleep onset and fragments sleep architecture; insufficient sleep in turn amplifies next-day emotional reactivity and HPA activation; and both contribute to, and are worsened by, anxiety and depressive symptoms. This circularity has two implications for the present review. First, an intervention that acts at any point in the cycle may produce change at the others, which makes single-outcome trials difficult to interpret. Second, causal claims in this literature must be made with unusual care, since cross-sectional associations are almost always compatible with reverse causation.

Psychological well-being more than the absence of distress, encompassing positive affect, life satisfaction and perceived capacity to cope is the endpoint toward which such interventions are ultimately directed, yet it is measured least consistently and frequently omitted in favour of narrower symptom scales.

Against this background, interest in Yoga and Ayurveda as lifestyle-based approaches has grown substantially. Their appeal is intelligible: both are behavioural rather than pharmacological, address multiple elements of the cluster simultaneously, are low-cost and scalable, and frame health as maintained through daily conduct rather than restored through episodic treatment. Ayurveda in particular offers an elaborated system of daily regimen (*Dinacharya*), diet (*Ahara*), sleep guidance (*Nidra*) and conduct (*Sadvritta*) that maps closely onto what health psychology calls lifestyle and behavioural regulation.

2. Ayurvedic Lifestyle and Health

Ayurveda locates health maintenance (*svasthavritta*) primarily in daily conduct rather than in therapeutics. Four concepts are directly relevant to sleep, stress and well-being. Each is presented here as a traditional concept; the evidential status of each is stated separately.

2.1 *Dinacharya* (daily routine)

Dinacharya prescribes a structured sequence of daily activity anchored to the solar cycle: rising in the pre-dawn period (*Brahma Muhurta*), oral and nasal hygiene, oil massage (*Abhyanga*), physical exercise (*Vyayama*), bathing, and regulated meal and sleep timing (Rai et al., 2022). Classical sources for these prescriptions include *Charaka Samhita* and *Ashtanga Hridaya*.

The correspondence with modern chronobiology is notable: *Dinacharya* is in effect a prescription for circadian entrainment through consistent light exposure,

activity and meal timing precisely the variables sleep science identifies as determinants of circadian stability. This is a conceptual convergence, not evidence of efficacy. Reviews of *Dinacharya* to date have been narrative and themselves conclude that prospective randomised trials are still required (Rai et al., 2022).

2.2 *Nidra* (sleep)

Ayurveda accords sleep the status of one of the three pillars (*trayopastambha*) of health, alongside diet and regulated conduct. Classical texts describe sleep as governed by *Kapha* and *Tamas,* address both insufficient and excessive sleep as pathological, discourage daytime sleep in most seasons and constitutions, and link disturbed sleep to *Vata* aggravation. Contemporary sleep-hygiene guidance overlaps substantially with these recommendations consistency of timing, avoidance of stimulation before bed, and moderation of daytime napping again by convergence rather than derivation.

2.3 *Ahara* (dietary practice)

Ayurvedic dietary guidance concerns not only what is eaten but when and how: regular meal timing, the principal meal at midday when digestive capacity (*agni*) is considered strongest, eating in a settled state, and avoiding food before sleep. The emphasis on meal *timing* rather than composition alone anticipates current interest in chrononutrition. Direct evidence linking Ayurvedic dietary practice to sleep or stress outcomes is not available.

2.4 *Sadvritta* (healthy conduct)

Sadvritta prescribes ethical and behavioural regulation truthfulness, restraint of anger and impulse, respectful social conduct, and cultivation of equanimity. Functionally, this is a code of emotional and interpersonal self-regulation. It has close conceptual parallels with contemporary constructs of emotion regulation and prosocial behaviour, both of which have established associations with psychological well-being. No study has operationalised *Sadvritta* as a measurable intervention.

2.5 *Prakriti* (constitution), briefly

Ayurveda holds that lifestyle prescriptions should be individualised to constitutional type. There is a genuine biological literature here: differences between extreme constitutional types have been reported in genome-wide expression and biochemistry (Prasher et al., 2008) and in genome-wide SNP distribution (Govindaraj et al., 2015). However, a critical review of 64 constitutional assessment tools developed to

2024 found that only two met most criteria of a standard scale-validation framework (Venkatesh et al., 2025). *Prakriti*-based individualisation is therefore a promising but currently unvalidated route to personalising lifestyle advice, and is not developed further here.

2.6 Evidence for Ayurvedic procedures

Where discrete Ayurvedic procedures have been tested, preliminary controlled evidence exists. *Shirodhara* (oil-dripping on the forehead) reduced state anxiety and produced significant decreases in plasma noradrenaline and urinary serotonin excretion relative to a supine control condition in healthy women (Uebaba et al., 2008). *Abhyanga* has been examined in a small pilot study of subjective stress experience (Basler, 2011). These are procedures rather than lifestyle practices, and the distinction matters: a procedure administered by a practitioner is not the same intervention as a self-maintained daily regimen.

Summary of evidential status. *Dinacharya*, *Nidra*, *Ahara* and *Sadvritta* are coherent, internally consistent behavioural frameworks with plausible correspondences to circadian science, sleep hygiene, chrono nutrition and emotion regulation respectively. None has been tested as a standardised intervention in a controlled trial with sleep, stress or well-being outcomes. They should be described as traditional lifestyle frameworks of emerging scientific interest, not as evidence-based interventions.

3. Yoga, Sleep and Stress

3.1 Yoga and sleep

Yoga Nidra provides the most specific and methodologically interesting sleep evidence. In a randomised parallel-design trial, 41 patients with chronic insomnia received either cognitive behavioural therapy for insomnia (n = 20) or Yoga Nidra (n = 21), with both subjective sleep diaries and objective polysomnography. Yoga Nidra produced marked improvement in N2 and N3 percentage of total sleep time, improved total wake duration and subjective sleep quality, and a statistically significant reduction in salivary cortisol (p = .041) (Datta et al., 2021). Subsequent electrophysiological work has examined local sleep phenomena during the practice itself (Datta et al., 2022). This combination of objective sleep architecture change plus a neuroendocrine marker is uncommon in the yoga literature and makes Yoga Nidra the most defensible single practice for sleep outcomes.

Against this, a large four-arm randomised trial of online Yoga Nidra (n = 362) found improvements versus waitlist with very small effect sizes (d = 0.08–0.16) and, against an active music control, a significant advantage only for depression (d = 0.13), though regular practice was associated with lower total cortisol and steeper diurnal slopes (Moszeik et al., 2025). The discrepancy with Datta et al. is instructive: supervised practice in a clinical insomnia population appears to yield larger effects than unsupervised online practice in a general population.

3.2 Yoga and stress

A systematic review of randomised controlled trials supported the benefit of Yoga on stress measures and mood (Pascoe & Bauer, 2015). A subsequent meta-analysis restricted to trials with active comparators, a design requirement that excludes weaker studies and controls for attention and general physical activity, reported reductions in cortisol, systolic blood pressure and heart rate, and improvement in HRV (Pascoe et al., 2017).

For anxiety, a systematic review and meta-analysis concluded that Yoga may be effective and safe for individuals with elevated anxiety, while finding the evidence inconclusive for diagnosed anxiety disorders (Cramer et al., 2018). This distinction is frequently lost in secondary citation and should be preserved.

For autonomic outcomes, a comprehensive review found that Yoga increases HRV and vagal dominance during practice, and that regular practitioners show higher resting vagal tone than non-practitioners (Tyagi & Cohen, 2016). The same review flags a methodological caution that is under-applied across the field: because high-frequency HRV is respiration-dependent and yogic practices deliberately alter respiratory rate, apparent HRV increases during practice may partly reflect respiratory mechanics rather than change in underlying vagal tone.

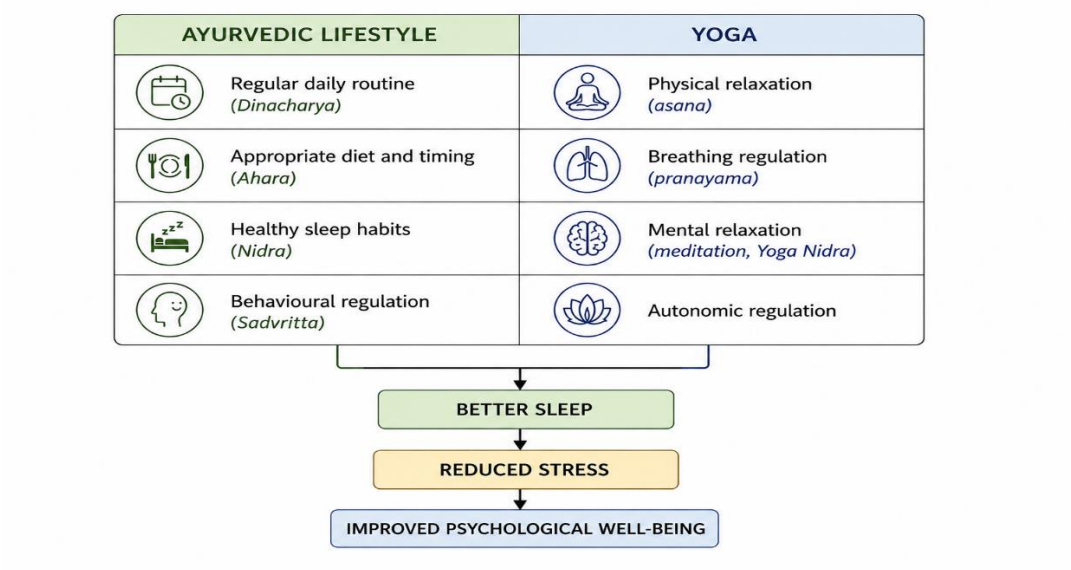
3.3 Mechanisms, briefly

The most robustly supported mechanism is respiratory. Slow breathing below approximately ten breaths per minute consistently increases HRV and respiratory sinus arrhythmia and shifts electroencephalographic activity toward alpha and theta bands, with associated psychological benefit in healthy participants (Zaccaro et al., 2018). Slow pranayama specifically reduced perceived stress and improved cardiovascular parameters in healthcare students (Sharma et al., 2013). Additional proposed pathways vagal–GABAergic modulation (Streeter et al., 2012), interoceptive recalibration, and emotion-regulation training remain preliminary or theoretical.

4. Integrated Yoga–Ayurveda Approach

This section sets out the conceptual case for integration, and states plainly how much of it is evidenced.

4.1 The proposed model



4.2 Ayurvedic lifestyle practice operates on the temporal architecture of behaviour. *Dinacharya* regulates *when* things happen waking, eating, activity, sleeping. Its proposed mechanism is circadian entrainment and behavioural consistency, and its effects, if real, would be slow, cumulative and preventive.

Yoga operates on acute physiological state. Asana, pranayama and Yoga Nidra produce measurable within-session change in autonomic balance, and repeated practice may shift resting tone. Its effects are relatively rapid and directly measurable.

A person practising Yoga daily at irregular times, sleeping erratically and eating late has an intervention acting against an unfavourable behavioural background. Conversely, a well-regulated routine without any active down-regulation practice provides structure but no acute mechanism for reducing arousal. On this reasoning, the two address different levels of the same problem one the scaffolding, the other the state and might reasonably be expected to combine additively.

4.3 What is actually evidenced

Very little. The most relevant study located is a feasibility and pilot efficacy trial combining Yoga with *Shirodhara* in adults with anxiety disorder, which reported improvement in sleep quality in both groups from baseline but no statistically

significant between-group differences, with the authors themselves noting the small sample and recommending a four-arm design (Yoga alone, Ayurveda alone, combined, control) to establish synergy (Bhargav et al., 2019). That recommended design has not, to the author's knowledge, been executed.

It must also be noted that this study combined Yoga with an Ayurvedic procedure, not with an Ayurvedic lifestyle regimen. No identified study has tested a standardised *Dinacharya*-based lifestyle protocol alongside Yoga with sleep, stress and well-being outcomes.

4.4 Potential roles, appropriately hedged

An integrated approach may plausibly contribute to preventive health (both are low-risk and suited to asymptomatic populations), lifestyle modification (Ayurveda supplies a structured behavioural framework that generic advice lacks), sleep health, stress management and quality of life. Each of these is a reasonable expectation derived from the separate evidence bases. None has been demonstrated for the integrated approach, and the distinction between "plausible" and "demonstrated" should be maintained in any clinical or policy recommendation.

5. Current Social Relevance

The behavioural profile these practices address is now widespread. Pre-sleep screen exposure delays sleep onset and displaces duration; sedentary work reduces the activity input supporting sleep pressure and mood; academic and workplace stress are consistently associated with disturbed sleep; and irregular sleep and meal timing driven by shift work and social scheduling disrupt circadian stability. Mental-health service demand exceeds supply in most settings, particularly for sub-threshold distress that impairs functioning without meeting diagnostic criteria.

Yoga and Ayurvedic lifestyle practice are relevant to this profile for reasons that are structural as much as therapeutic. Both are behavioural and self-administered, and therefore scalable without proportionate workforce expansion. Both are preventive in orientation, targeting the sub-clinical population that formal services cannot absorb. Both are culturally embedded in South Asian populations, which may support adherence in ways that imported interventions do not. And both are framed as daily conduct rather than treatment, which suits conditions arising from habit rather than pathology.

These are arguments for investigating and, cautiously, for offering such

practices as health-promoting behaviour. They are not arguments for treating them as established therapies, and public health messaging should not conflate the two.

6. Table

Table 1. Summary of evidence on Yoga and Ayurvedic lifestyle practices for sleep, stress and psychological well-being.

Intervention/ Practice	Target Outcome	Evidence / Findings	Major Limitation
Yoga (composite), women with sleep problems (Wang et al., 2020)	Sleep quality; insomnia severity	Meta-analysis, 19 studies, *n* = 1,832: overall sleep improvement SMD = −0.33; PSQI SMD = −0.54 in 16 RCTs	No effect on ISI (3 RCTs) or in breast-cancer populations (7 RCTs); women only
Exercise including mind–body modalities (Xie et al., 2021)	Sleep quality	Meta-analysis of 22 RCTs; mind–body and conventional exercise improved subjective sleep to similar extent	Cannot separate Yoga-specific from general activity effects
Yoga Nidra, chronic insomnia (Datta et al., 2021)	Sleep architecture; cortisol	RCT, *n* = 41 (vs CBT-I): improved N2/N3 % of total sleep time, total wake duration, subjective quality; salivary cortisol reduced (*p* = .041)	Small sample; PSG repeated only in volunteers; single centre
Yoga Nidra, online (Moszeik et al., 2025)	Stress, anxiety, depression, sleep, diurnal cortisol	4-arm RCT, *n* = 362: benefit vs waitlist *d* = 0.08–0.16; vs active control only depression (*d* = 0.13)	Very small effect sizes; unsupervised delivery; self-report adherence
Yoga (composite) vs active controls (Pascoe et al., 2017)	Cortisol, blood pressure, heart rate, HRV	Meta-analysis of RCTs: reductions in cortisol, systolic BP, heart rate; improved HRV	Heterogeneous protocols; cortisol findings inconsistent elsewhere
Yoga (Pascoe & Bauer, 2015)	Perceived stress; mood	Systematic review of RCTs: support for benefit on stress and mood	Variable trial quality; few active comparators
Yoga (Cramer et al., 2018)	Anxiety	Meta-analysis: effective and safe for elevated anxiety	Inconclusive for diagnosed anxiety disorders

Yoga (Tyagi & Cohen, 2016)	Heart-rate variability	Systematic review: increased HRV and vagal dominance during practice; higher resting vagal tone in practitioners	Respiratory confounding of HF-HRV rarely controlled
Slow breathing / pranayama (Zaccaro et al., 2018)	Autonomic and cortical activity; psychological state	Systematic review: slow breathing (<10 breaths/min) increases HRV and RSA, shifts EEG to alpha/theta	Healthy participants; acute effects; heterogeneous techniques
Slow vs fast pranayama (Sharma et al., 2013)	Perceived stress; cardiovascular parameters	Slow pranayama reduced perceived stress and improved cardiovascular parameters	Single population (healthcare students); no active control
Shirodhara (Uebaba et al., 2008)	State anxiety; sympathetic markers	Controlled study, healthy women: reduced state anxiety; significant decreases in plasma noradrenaline and urinary serotonin vs control	Small samples; acute single-session; healthy females only
Abhyanga (Basler, 2011)	Subjective stress	Pilot, n = 20: single-session effect on subjective stress experience, HR and BP	Pilot; no control group; single dose
Yoga + *Shirodhara*, anxiety disorder (Bhargav et al., 2019)	Anxiety symptoms; cognition; sleep quality	Feasibility/pilot: improvement in both groups from baseline; no significant between-group difference	Small sample; no four-arm design; feasibility endpoint
Dinacharya (Rai et al., 2022)	Lifestyle disorders; preventive health	Narrative/conceptual review: correspondence with circadian and metabolic science	No controlled trial; authors themselves call for prospective RCTs

7. Discussion

Current literature offers cautiously positive but uneven support for yoga's role in sleep and stress regulation. Across general populations, yoga is associated with modest gains in subjective sleep quality, reflected in small-to-moderate effect sizes, though this benefit does not reliably transfer to insomnia severity scores or to clinical groups such as breast cancer patients, indicating that outcome measure and population substantially shape detectable effects (Wang et al., 2020). Among specific protocols, Yoga Nidra

shows the most compelling evidence, with supervised trials demonstrating genuine polysomnographic changes in sleep architecture alongside reductions in salivary cortisol among individuals with chronic insomnia (Datta et al., 2021); notably, a large-scale unsupervised digital version of the same practice yielded only negligible benefits (Moszeik et al., 2025), underscoring that therapeutic supervision, rather than the technique alone, may drive efficacy. With respect to stress, yoga demonstrates moderate-confidence reductions in perceived stress and subclinical anxiety, accompanied by measurable physiological shifts lower cortisol, blood pressure, and heart rate relative to active control conditions (Pascoe et al., 2017); however, its value for formally diagnosed anxiety disorders remains unresolved (Cramer et al., 2018), and effect magnitudes across studies stay modest, positioning yoga as a supportive rather than transformative stress-management tool. Evidence for Ayurvedic lifestyle interventions is considerably thinner. Isolated procedures like Shirodhara have preliminary controlled backing for anxiety and neuroendocrine outcomes (Uebaba et al., 2008), and Abhyanga has only pilot-level data (Basler, 2011), while broader constructs Dinacharya, Nidra, Ahara, and Sadvritta remain theoretically aligned with circadian and sleep-hygiene science but lack rigorous empirical validation, a gap reviewer themselves acknowledge (Rai et al., 2022). Because sleep, stress, and well-being interact bidirectionally, single-outcome trial designs struggle to isolate causal mechanisms, and cross-sectional associations remain vulnerable to reverse causation. The prospect of combining yoga and Ayurveda as complementary practices pairing behavioural-temporal structuring with acute physiological regulation is conceptually appealing yet essentially untested empirically, with the sole combined trial finding no significant between-group difference and explicitly calling for a four-arm design (Bhargav et al., 2019). Overall, the evidence base is strongest for yoga's general effects on subjective sleep and stress, more provisional for Yoga Nidra and Shirodhara, and largely hypothesis-generating for broader Ayurvedic constructs, further complicated by inconsistent outcome measures and poorly standardized intervention definitions across studies.

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7. Conclusion

Emerging evidence indicates that Yoga may contribute to improved sleep quality and reduced perceived stress and anxiety, with effect sizes that are modest rather than large, and with benefit more consistently demonstrated in general than in clinical populations. Among specific practices, Yoga Nidra suggests a particular potential role, being the only practice reviewed here with both objective sleep-architecture change and a neuroendocrine marker in a randomised trial, although this finding requires replication in larger supervised samples. Ayurvedic lifestyle practices *Dinacharya*, *Nidra*, *Ahara* and *Sadvritta* constitute a coherent and internally consistent behavioural framework whose correspondences with circadian science, sleep hygiene and emotion regulation are striking. These correspondences are conceptual, however, and do not by themselves constitute evidence of efficacy. Discrete Ayurvedic procedures such as *Shirodhara* have preliminary controlled support, but a procedure is not a lifestyle regimen, and the lifestyle concepts themselves await controlled evaluation.

An integrated approach is theoretically attractive, since the two traditions plausibly address different levels of the same problem behavioural timing and structure on one hand, acute physiological regulation on the other. This potential complementarity requires further investigation rather than assertion; the one available combined study found no significant between-group advantage.

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Psychiatric Dimensions of Phantom Limb Syndrome: A Case Report Highlighting Comorbid Major Depression and Somatoform Interplay

Dr. Shuchi Pande[*]

Abstract: Phantom Limb Syndrome (PLS) is frequently approached as a strictly neurological or surgical complication resulting from peripheral nerve trauma and subsequent central cortical remapping. However, the profound bidirectional dynamic between somatic phantom sensations and severe psychiatric comorbidities is regularly overlooked in baseline clinical settings. This case report describes a 42-year-old male who developed chronic, treatment-resistant Phantom Limb Pain (PLP) after a traumatic below-elbow amputation. The persistent pain was followed by severe Major Depressive Disorder (MDD), passive suicidal ideation, and post-traumatic panic symptoms. The clinical progression reveals how emotional distress directly accentuates central pain amplification pathways. A multidisciplinary framework combining dual-action neuro-psychopharmacology (Duloxetine and Pregabalin), structured Cognitive Behavioural Therapy (CBT), and Mirror Visual Feedback (MVF) yielded comprehensive symptomatic remission. This report serves an educational purpose by defining concrete management pathways for upcoming medical professionals navigating psychosomatic anomalies.

Key words: Peripheral nerve trauma, Cognitive Behavioural Therapy, Mirror Visual Feedback, Mental Status Examination, psychological amplification .

Introduction: Phantom Limb Syndrome [1] refers to the persistent perception of sensory or kinetic feedback emanating from an anatomical limb that has been surgically resected or traumatically avulsed. While neurobiological hypotheses explicitly document maladaptive neuroplasticity and thalamocortical reorganization as primary drivers, clinical evidence confirms that psychological states heavily modulate the threshold and severity of these phantom phenomena. In the Indian medical education landscape, integrated training bridging psychiatry, orthopaedics, and physical rehabilitation remains highly segregated. This case study bridges that diagnostic gap, mapping out how affective disorders amplify somatic distress and providing clear

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guidelines for clinicians to identify, evaluate, and counter this distressing condition.

Patient History: A 42-year-old male presented to the psychiatric outpatient department presenting with a 6-month history of debilitating, unremitting 'crushing and burning' sensations localized to a missing right forearm. The patient had undergone a right below elbow amputation 12 months prior following a high-impact motor vehicle accident. Initial post-operative healing was surgically uneventful, but within three weeks, the patient experienced an intrusive perception that his amputated right forearm was rigidly clenched in a painful, unnatural inversion.

Psychiatric Progression: Over the subsequent months, the severity of the phantom sensations scaled linearly with rising stress levels. The patient began avoiding physical rehabilitation, experienced acute panic flare-ups when encountering visual triggers of his residual stump, and developed profound sleep fragmentation (sleeping less than 3 hours per night). He described a complete loss of bodily integrity, stating he felt 'anatomically broken', leading to profound social isolation, self-neglect, and passive expressions of death wishes.

Mental Status Examination (MSE) :

General Appearance & Behavior: Disheveled appearance, poor self-care, minimal eye contact. The patient sat rigidly, guarding his stump defensively from any visual or physical contact.

Speech: Hypophonic, slow, prolonged reaction latency, and monotone delivery.

Mood & Affect: Mood reported as 'hopeless and completely depleted'; affect was profoundly restricted, dysphoric, and highly congruent with thought parameters.

Thought Content: Marked by severe somatic preoccupations focused on the clenching phantom arm, ideas of worthlessness, and passive suicidal ideation without active planning or intent. No formal thought disorders, delusions, or perceptual disturbances (outside the somatic phantom phenomenon) were present.

Cognition & Insight: Sensorium clear; attention and concentration mildly impaired secondary to pain-driven distraction. Orientation and memory intact. Insight was graded at Level 4 (Intellectual Insight: recognizing illness and pain origin but attributing it exclusively to an unresolvable structural deficit rather than realizing psychological amplification).

Diagnostic Formulation & Metric Assessment

The clinical presentation supported a multi-layered diagnostic formulation meeting ICD-11 criteria for Major Depressive Disorder (Severe Episode without

Psychotic Symptoms), comorbid Post-Traumatic Stress Disorder (PTSD) stemming from the vehicle accident, and Somatic Symptom Disorder. A comprehensive metric analysis was conducted at baseline to track treatment efficacy accurately.

Multidisciplinary Therapeutic Strategy

An integrated bio-psycho-social protocol was deployed to simultaneously break down the central pain hypersensitivity and the underlying emotional distress.

Pharmacological Intervention

1. ***Duloxetine (Serotonin-Norepinephrine Reuptake Inhibitor - SNRI):*** Initiated at 30 mg/day and up-titrated to 60 mg/day. Duloxetine was strategically selected to achieve a dual objective: addressing the severe depressive episode while reinforcing descending monoaminergic inhibitory pain pathways within the spinal cord.

2. ***Pregabalin (Gabapentinoid):*** Started at 75 mg/day at bedtime, gradually titrated to 150 mg/day. This served to modulate alpha-2-delta subunits of voltage-gated calcium channels, effectively reducing the release of pro-nociceptive neurotransmitters (such as glutamate and Substance P) from hyper-excited afferent neurons in the residual limb.

Psychotherapeutic & Somatosensory Interventions [2][3]

1. Mirror Visual Feedback (MVF): The patient participated in structured mirror therapy sessions for 15 minutes daily. By placing a vertical mirror between his upper extremities, the patient viewed the reflection of his intact left limb moving fluidly, creating a powerful visual illusion that the missing right arm was executing normal, painless motor commands. This effectively resolved the visual-proprioceptive mismatch locked within the sensorimotor cortex.

2. Cognitive Behavioral Therapy (CBT) for Chronic Pain: Focused on cognitive restructuring regarding somatic catastrophes. Behavioral interventions included progressive muscle relaxation (PMR) tailored around the non-amputated structures and systematic desensitization to counter the trauma-induced stump avoidance behavior.

Clinical Outcomes & Progress[4][5]

Following six months of consistent multidisciplinary adherence, the patient demonstrated profound clinical improvements:

- **Pain Mitigation[3]**: Subjective VAS pain scores dropped substantially from 8.5/10 to a manageable 3.0/10. The patient described the sensation shifting from a 'crushing

claw' to a transient, non-painful awareness.

- **Psychiatric Stabilization**: Repeat HADS testing revealed scores within normal thresholds (Depression: 6, Anxiety: 5). Passive suicidal ideation completely resolved within the first 6 weeks of SNRI optimization.
- **Functional Rehabilitation**: With the reduction of somatic fear and panic symptoms, the patient successfully achieved full prosthesis assimilation, returning to independent community ambulation and part-time employment.

Educational Value & Core Takeaways

For medical students, residents, and practitioners, this case highlights essential clinical axioms:

1. **Pain is Psychosomatic:** Chronic pain states like PLS cannot be treated in a silo. Emotional distress alters central pain processing, rendering standard peripheral analgesics ineffective.[4]
2. **Early Multidisciplinary Referral:** Post-amputation protocols must integrate mandatory psychiatric screenings. Early deployment of non-invasive tools like Mirror Visual Feedback alongside SNRIs can prevent long-term functional disability.
3. **Targeting Cortical Mismatch**: Interventions like MVF demonstrate that retraining the brain's spatial maps is just as vital as chemical modulation when resolving complex phantom phenomena.

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रोगचिकित्साया: वैदिकोपाया: (मन्त्र-तन्त्र-यन्त्राणाम् विशेषसन्दर्भे)

प्रोफेसरहरीश्वरदीक्षित: *

सारांश:

मनुष्यस्य जीवनं जन्म-मरण-जराव्याध्यादिभिः षड्भावविकारैः निरन्तरं प्रभावितं भवति। पूर्वजन्मकृतकर्मणां फलस्वरूपेण विविधाः व्याधयः दुःखानि च जायन्ते इति शास्त्रेषु प्रतिपादितम्। तेषां रोगाणां तथा जीवनसम्बद्धानाम् अनिष्टानां निवारणाय शास्त्रेषु मन्त्र-तन्त्र-यन्त्रादयः विविधाः उपायाः निर्दिष्टाः सन्ति। अस्मिन् लेखे मन्त्र-तन्त्र-यन्त्राणां स्वरूपं, तेषां पारस्परिकसम्बन्धः तथा रोगनिवारणे तेषां प्रयोगः विस्तरेण विविच्यते।

'मन्त्र'शब्दस्य व्युत्पत्तिः मनन-त्राणयोः सम्बन्धेन क्रियते। मननात् त्रायते इति मन्त्रः। ऋग्वेद-यजुर्वेद-सामवेद-निगदादिषु मन्त्राणां प्रयोगः दृश्यते। मन्त्राः पौरुषेयाः अपौरुषेयाश्च भवन्ति। वैदिकमन्त्राः अपौरुषेयाः, सिद्धर्षिप्रणीताः मन्त्राः पौरुषेयाः इति विवेचनम् अत्र दृश्यते। विविधभाषानिबद्धाः शाबरमन्त्राः अपि रोगनिवारणादिषु प्रयुज्यन्ते।

'तन्त्र'शब्दस्य विविधाः अर्थाः शास्त्रेषु प्रतिपादिताः सन्ति। तन्त्रं साधनम्, शास्त्रम्, व्यवहारः, नियमः इत्याद्यर्थेषु प्रयुज्यते। शिवप्रोक्तं विधानशास्त्रं तन्त्रम् इति लेखे प्रतिपादितम्। तन्त्रस्य लक्षणेषु सर्गः, प्रतिसर्गः, मन्त्रनिर्णयः, देवतानां संस्थानम्, आश्रमधर्मः, यन्त्रनिर्णयः, राजधर्मः, दानधर्मः, व्यवहारः तथा अध्यात्मवर्णनम् इत्यादयः विषयाः अन्तर्भवन्ति।

'यन्त्र' देवताधिष्ठानरूपं पूजासाधनं च मन्यते। विविधेषु शास्त्रेषु यन्त्रस्य अनेकाः प्रयोगविधयः वर्णिताः सन्ति। पूजायन्त्रं, धारणयन्त्रं, रसादिद्रव्यसाधनयन्त्रं, ज्योतिषशास्त्रीययन्त्रं च तेषु प्रमुखाः सन्ति। यन्त्रं मन्त्रात्मकं तथा देवतात्मकं मन्यते, तस्य पूजनेन देवता प्रसन्ना भवतीति तान्त्रिकग्रन्थेषु प्रतिपादितम्। रोगचिकित्सायां मन्त्राणां प्रयोगः वैदिकपरम्परायां विशेषमहत्त्वपूर्णः आसीत्। शरीरसादनम्, चक्षुरोगशान्तिः, अजीर्णरोगशान्तिः, रुजाशमनम्, औषधिगुणसम्पादनम्, अभिचारोपशमनम् तथा वास्तुदोषशान्तिः इत्यादिषु मन्त्रप्रयोगाः उल्लिखिताः सन्ति। अथर्ववेदे तथा अन्येषु वैदिकग्रन्थेषु रोगनाशाय विविधाः प्रयोगाः उपलब्धाः सन्ति।

तान्त्रिकयन्त्रप्रयोगेण अपि रोगकष्टनिवृत्तेः उल्लेखः प्राचीनग्रन्थेषु दृश्यते। दुर्गासप्तशतीपाठः, तद्दृतयन्त्रानुष्ठानम्, विविधभाषानिबद्धमन्त्रप्रयोगाः, बालानां रोगरक्षणाय मन्त्र-यन्त्र-औषधीनां प्रयोगश्च परम्परायां प्रचलितः आसीत्। यन्त्रचिन्तामणिग्रन्थे विविधरोगकष्टनिवारणाय शताधिकयन्त्राणां वर्णनमपि निर्दिष्टम् अस्ति।

अतः मन्त्र-तन्त्र-यन्त्राणां प्रयोगः भारतीयप्राचीनचिकित्सापरम्परायाः एकः महत्त्वपूर्णः अङ्गः आसीत् इति ज्ञायते। एते उपायाः केवलं शारीरिकरोगशमनाय न, अपितु मानसिकशान्तये, आध्यात्मिककल्याणाय तथा जीवनसम्बद्धानाम् अनिष्टानां निवारणाय अपि प्रयुक्ताः इति लेखस्य प्रतिपादनम्। आधुनिकविज्ञानस्य विकासेन प्राचीनप्रयोगाः किञ्चित् उपेक्षिताः सन्ति, तथापि तेषां परम्परागतमहत्त्वं तथा सांस्कृतिकं योगदानं विस्मर्तुं न शक्यते।

Keywords: *मन्त्र, तन्त्र, यन्त्र, रोगचिकित्सा, रोगनिवारण, वैदिक चिकित्सा, मन्त्रचिकित्सा, कर्मविपाक।*

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जाताभिवृद्धिक्षयादिप्रमुखै: षड्भावविकारैरावृत्तोऽयंलोक:[१] स्वकर्मफलैर्निवद्ध: घटिकायन्वत् स्वजन्ममरणलीलां वरयति। **''नाभुक्तंक्षीयते कर्म कल्पकोटिशतैरपीति''**[२] शास्त्रवचनाज्जीवस्य स्वकर्मफलभोगरनिवार्य एव। कर्मफलानुरोधेनैव तस्य तत्तद्भौगोलिकवातावरणे धनाद्यदरिद्रादिपरिवारे आधिदैविकाधिभौतिकाध्यात्मिकादि सुख-दुखैरावृतो जनिर्भवति जीवनं च यापयति। पूर्वजन्मकृताशुभकर्मणां फलमेवविविधव्याधिरूपेण पीडयति। उक्तं हि-

पूर्वजन्मकृतं पापं व्याधिरूपेण पीड्यते।

तच्छन्तिरोषधैर्दानैर्जपहोमसुरार्चनै:।।[३]

अत एव शास्त्रेषु जीवने समागतानां समस्तारिष्टानां निवारणाय मणि-मन्त्रौषधादय उपाया: समुपदिष्टा: सन्ति। एतेषामेवोपायानां मध्ये मन्त्र-तन्त्र-यन्त्रादय उपाया: अन्तर्भूता: सन्ति। एतैस्त्रिविधोपायै: रोगाणां निवारणं कथं भवतीति विवरणप्रदानात् प्राव्ङ पारिभाषिकार्थज्ञानं प्रथमत आपतति। अतस्तेषां स्वरूपचिन्तनमत्र प्रस्तूयते।

मन्त्र: -

मन्त्रा: मननात्।[४] **मननात् त्रायते यस्मान् तस्मान् मन्त्रा: प्रकीर्तिता:।**[५]

मननान्मुनिशार्दूल त्राणं कुर्वन्ति वै यत:।

ददते पदमात्मीयं तस्मान्मन्त्रा: प्रकीर्तित:।।[६]

ऋचो यजूँषि सामानि निगदा मन्त्रा:।[७]

अनुष्ठेयार्थस्मारका हि मन्त्रा:।८

प्रयोगसमवेतार्थ स्मारका मन्त्रा:।[९]

तच्चोदकेषु मन्त्राख्या शेषे ब्राह्मणशब्द:।[१०]

कर्मानुष्ठानौपाधिकप्रयोक्तव्यो वैदिकशब्दराशिर्मन्त्र:।।[११]

रहस्यालोचनं मन्त्र:।[१२]

मननात्सत्त्वरूपस्य देवस्यामिततेजस:।

त्रायते सर्वदु:खेभ्यस्तस्यान्मन्त्र इतीरित:।।[१३]

मन्त्रो ह्यन्तर्गुप्तभाषणात्मकपरपरामर्शतत्त्वेन मननत्राणधर्मा परतत्त्व प्राप्त्युपाय:

(स्वछन्दोद्योक्तपटल:)[१४]

तन्त्रसङ्ग्रहग्रन्थे अकारादि: क्षकारान्तावर्णानां बिन्दुसंयुक्तानां मन्त्रत्वं वर्णितम् ।[१५]

इति विविधशास्त्रेषु मन्त्रस्वरूपं यथा यत्र वर्णितं तत्स्वरूपज्ञानाय संगृहीतम्। अत: परं तन्त्रस्वरूपचिन्तनं प्रस्तूयते-

तन्त्रम् -

- तन्त्रमितिकुलम्। यथा- **सर्वानुपायानथसम्प्रधाय समुद्धरेत् स्वस्य कुलस्यतन्त्रम्।**[१६]

- वयनसाधनम्। ''तदापश्यत् स्त्रियौ तन्त्रे अधिरोप्य सुवेमे पटं वयन्तौ''[१७]

- शास्त्रम्। ''अवैरज्ञमतन्त्रज्ञं वालचेष्टा समन्वितम्''[१८]

- व्यवहार:, नियमादि:। **श्रुत्वा त्वं प्रतिपद्यस्व प्राज्ञै: सहपुरोहितै:।**
आपद्धर्मार्थकुशलैर्लोकतन्त्रमवेक्ष्य च।।[१९]

- चतु:षष्टि संज्ञकं शिवोक्तशास्त्रम्। यथा-

चतु:षष्टिश्च तन्त्राणि यामलादीनिपार्वति।
सफलानीहवाराहे विष्णुक्रान्तासु भूमिषु।।[२०]

तन्त्रस्य लक्षणम् -

सर्गश्च प्रतिसर्गश्च मन्त्रनिर्णय एव च।
देवतानाञ्च संस्थानं तीर्थानाञ्चैव वर्णनम्।।
तथैवाश्रमधर्मश्च विप्रसंस्थानवमेव च।
संस्थानञ्चैव भूतानां यन्त्राणञ्चैवनिर्णय:।।
हरचक्रस्य चाख्यानं स्त्रीपुंसोश्चैवलक्षणम्।
राजधर्मो दान धर्मो युगधर्मस्तथैव च।
व्यवहार: कथ्यते च तथा चाध्यात्मवर्णनम्।।
इत्यादिलक्षणैर्युक्तंतन्त्रमित्यभिधीयते।।[२१]

शास्त्रोक्तविवरणाघवलोकनेनेदं ज्ञायते यत् नृणामभीष्टफललाभाय शिवप्रोक्तं विधानशास्त्रं तन्त्रमित्यमिधीयते।

यन्त्रम् - देवाद्यधिष्ठानम्

अर्थाभावे तथा यन्त्रं नवार्णमन्त्रसंयुतम्।
स्थापयेत्पीठपूजार्थं कलशं तत्र पार्श्वत:।।[२२]

(यन्त्रम्) वायम् - **यन्त्रस्य गुणदोषौ न विचार्यौ मधुसूदन।**
अहं यन्त्रं भवान् यन्त्री न मे दोषा न मे गुणा:।।[२३]

(यन्त्रम्) 'कल' इति भाषायाम् -**ईश्वर: सर्वभूतानां हृद्देशेऽर्जुनतिष्ठति।**
भ्रामयन् सर्वभूतानि यान्त्रारूढानि मायमा।।[२४]

यथा- दारुमययन्त्रारूढ़ानि कृत्रिमाणि भूतानि सूत्राधारो लोके भ्रामयति तद्वदिति। यद्वा यन्त्राणि शरीराणि आरूढ़ानि भूतानि देहाभिमानिनो (जनान्) जीवान् भ्रामयन्नित्यर्थ:।[२५]

यन्त्रम् (पूजाधारम्) **आपोऽग्निर्हृदयं चक्रं विष्णो: क्षेत्रसमुद्भवम्।**

(पूजनयन्त्रम्) **यन्त्रञ्च प्रतिमास्थानमर्चने सर्वदाह्मरे:।।**[२६]

शालग्राममणौ यन्त्रे प्रतिमामण्डलेषु च।

नित्यं पूजा हरे: कार्या न तु केवल भूतले।।

लिङ्गस्थां पूजयेद्देवीं पुस्तकस्थां तथैव च।

मण्डलस्थां महामायां यन्त्रस्थां प्रतिमासु च।

जलस्थां वा शिलायां वा पूजयेत्परमेश्वरीम्।।

यत्रापराजितापुष्पं जवापुष्पं च विद्यते।

करवीरेशुक्लरक्ते द्रोणं वा यत्र तिष्ठति

तत्र देवी वसेन्नित्यं तद् यन्त्रे चण्डिकार्चनम्।।[२७] **(एतत्सर्वं यन्त्राभावे)**

यन्त्रं मन्त्रमयं प्रोक्तं मन्त्रात्मादेवतैव हि।

देहात्मनोर्यथाभेदो यन्त्रदेवतयोस्तथा।।

आदौ लिखेद् यन्त्रराजं देवतायाश्च विग्रहम्।

कामक्रोधादिदोषोत्थसर्वदु:खनियन्त्रणात्।।

यन्त्रमित्याहुरेतस्मिन् देव: प्रीणाति पूजित:।

विना यन्त्रेणपूजायां देवता न प्रसीदति।

दु:खनियन्त्रणाद् यन्त्रमित्याहुस्तन्त्रवेदिन:।।[२८]

धारणयन्त्रम् - **यन्त्रं च विन्ध्यवासिन्या: प्रोक्तं सर्व समृद्धिदम्।**

रक्षाकरं विशेषेण क्षुद्रभूतादिनाशनम्।

राज्यदं भ्रष्टराज्यानां वश्यदं वश्यमिच्छताम्।। इत्यादि[२९]

रसादिद्रव्यसाधनयन्त्रम् - **ऊर्ध्वाध: सम्पुटाकारं तन्मध्ये रससंस्थितम्।**

(आयुर्वेदीययन्त्रम्) **कवचीयन्त्रमित्येतद्रसादिद्रव्यसाधनम्।**

ज्योति: शास्त्रीयवेधयन्त्रम् - **गोलो नाडीवलयं यष्टि: शङ्कुर्घटी चक्रम्।**

(गोलाध्यायोक्तयन्त्राणि) **तापं तूर्यफलकं धीरेकं पारमार्थिकं यन्त्रम् ।**[३०]

एतावान्सन्दर्भस्यायमाशयोयत् - **मन्त्रो हि पौरूषेयापौरुषेयत्वेन मुख्यतया द्विविध:।**

तत्रापौरुषेया: वेदमन्त्रा: पौरुषेयाश्चसिद्धर्षिभि: प्रणीता:।

युष्माभि: स्तुतयो याश्च याश्चब्रह्मर्षिभि: कृता:।

ब्रह्मणा च कृतास्तास्तु प्रयच्छन्ति शुभां मतिम्।।[३१]

तत्र पौरुषेया अपि द्विविधा: संस्कृतनिष्ठा: भाषानिवद्धाश्च। संस्कृतनिष्ठा: नवार्णादिमन्त्ररूपा: बीजाक्षरनिबद्धाश्च। विविधरोगविषाद्युपशामका तत्तद्भाषानिबद्धा: शाबरमन्त्रा:।[३२] तान्त्रिकप्रयोगपरा अपि मन्त्रा: संस्कृतनिष्ठा एव।

वैदिकप्रयोगद्भिन्नत्वेन अनुभष्ठानविधे: भिन्नत्वेन च प्रणीतत्वात् तान्त्रिकप्रयोगत्वेन तन्त्रस्य स्वतन्त्रप्रतिष्ठास्ति। तान्त्रिकप्रयोगस्य येन केनापि साधकेन कर्तुं प्राय: समधिकारात् क्वचिल्लोकप्रियतापि दृश्यते। अनेनापि मन्त्र प्रयोगवत् सर्वा अपि मानवसुलभा: अभिलाषा: सम्पूरयितुं जन: प्रभवति।

सामान्यत: जनानामयं विश्वासो यदितरेषु युगेषु तन्त्रमन्त्रयो: प्रतिष्ठासीत्, परन्तु कलौ यन्त्रस्य प्राधान्यं वर्तते। यन्त्रमित्युक्ते तत्स्वरूपं बहुधा समक्षमायाति। रोगाद्युपद्रवशान्तये भोजपत्रादिषु गोरोचनादिपदार्थविशेषैर्लेखनीयमाकृति विशेषं यन्त्रमितिकथ्यते।[३३] अथापीतराणि प्रसिद्धानि यन्त्राणि सन्ति। गायकानां वाद्ययन्त्रम्। वैद्यकानां रसायनसाधकं यन्त्रं शैल्ययन्त्रमित्यदि। ज्योतिर्विदां वेधकादियन्त्रम्। आधुनिकसंगणकादियन्त्राणां तु संख्यानं कर्तुं न शक्यते। विशेषत: यान्त्रिकयुगोऽयमिति तद्विदां व्यपदेश:। पारम्परिकयन्त्रै: आधुनिकैरपि यन्त्रै: रूजां निवारणं निदानं वा नूनं भवत्येव। अतोऽत्र मन्त्र-तन्त्र-यन्त्रै: रोगनिवारणविषये शास्त्रसिद्धानां प्रयोगसिद्धानाञ्च पारस्परिकोपायमत्र यथाप्रमाणं प्रस्तूयते।

मन्त्रै: रोगनिवारणम् -

वेदोक्तमन्त्राणां नित्य-नैमित्तिक-काम्यप्रयश्चित्तादिषु कर्मसु प्रयोगो भवत्येव। श्रौतसूत्रै: श्रौतयागा: प्रतिपाद्यन्ते स्मार्तसूत्रैश्च स्मार्तकर्माणि। मन्त्रैकत्वे सति प्रयोगबहुत्वमिति सिद्धान्त: ऋषिभि: स्वीकृतत्वात् एक एव मन्त्र: नित्य-नैमित्तिक-काम्यकर्मसु प्रयुज्यते। संहितायां पठितानां मन्त्राणां काम्यकर्मस्वपि प्रयोगो भवति। अत एव चतुर्षु वेदेषु काम्यप्रयोग प्रतिपादनाय विधानसूत्राणि विद्यन्ते। ऋविग्धानम्। यजुर्विधानम्। सामविधानम् अथर्वविधानञ्च।

रूजामुपद्रवाणां वा शान्तये प्रयोगा: दृश्यन्ते यथा-

शत्रोरूत्सादनम्। चक्षुरोगशान्ति:। अजीर्णरोगशान्ति:। यथा-

अग्ने दब्धाय इति बह्वारभुक्त्वोदरमालभ्य जपेदश्वानमपि जारयति।[३४]

रुजो मुक्ति: - **तनूपा अग्नेसीति रुजाग्रस्तो दूर्वा जुहुयान् रुजा मुच्यते।**[३५]

औषधगुणसम्बर्धनेनारोग्यलाभ: -

''या ओषधीत्यृगुभयेनौषधीमभिमन्त्र्य पाययेदारोग्यं भवति।''[३६]

अभिचारोपशमनम् -

''मा पाहिँसीरित्यभिचार्यमाण आज्यं जुहुयात् शान्तिर्भवति।''[३७]

वास्तुदोषशान्ति: -

''स नो भुवनस्येति गृहवास्तुनाज्याहुतीनामष्टसहस्रं जुहुयाद् वास्तु दोषान्मुच्यते।''[३८]

एवमृग्विधानेसामविधानब्राह्मणेऽथर्ववेदेचानेके प्रयोगा: रोगनाशाय वर्तन्ते। अग्निपुराणे तु यजुर्वेदीयमन्त्राणां विभिन्नकाम्यकर्मसु प्रयोग: चतुरशीतिश्लोकैवर्णितो वर्तते। एवं वैदिकमन्त्रै: रोगचिकित्साविवरणमुपस्थापितम्। रोगाणां पापमूलत्वात् पापविनाशनेनैव रोगाणां शान्तिर्भवतीतिधिया क्वचित्पुण्यकर्मणा रोगशान्त्युपाय: प्रदर्शित:। यथा श्रीमद्भागवते-

तपसाब्रह्मचर्येण शमेनच दमेन च।
त्यागेन सत्य शौचाभ्यां यमेन नियमेन च।।
देहवाग्वुद्धिजं धीरा धर्मज्ञा: श्रद्धयान्विता:।
क्षिपन्त्यघं महदपि वेणुगुल्ममिवानल:।।[३९]

केन पापेन कीदृश: रोगग्रस्तो भवति अथवैवं वक्तव्यं रोगं दृष्ट्वा पापस्यानुमानं कृत्वा तच्छान्तये उपाय उपदिश्यते। अन्वय व्यतिरेकाभ्यां पापरोगयो: सम्बन्ध:।

तान्त्रिक मन्त्रप्रयोगेणापि रोगनाश: बहुधा श्रूयते क्रियते च। दुर्गासप्तशत्या: पाठेन तद्गतमन्त्रानुष्ठानेन च रोगकष्टेभ्योनिवृत्ति: प्रगोगसिद्ध: साधित: प्राचीनै: सूरिभि:, अद्यापि तथैवानुष्ठाने प्रवर्तन्ते जना:।

भाषागतसिद्धमन्त्रै: सर्प-वृश्चिक-व्रणादिपीडाभ्य: झटिति निवर्तन्ते जना:।

यथा- करवलाई भाषामन्त्रेण ब्रणपीडानिवृत्ति:-

ॐ नमो करवलाई भरीतलाई जहाँ बैठ हनुमन्त आई।
पचै न फूटे चलै न लाल रक्षा करे गुरु गोरख बाल।।

प्राकृत भाषायाम् - **ॐ नमो जिणाणं जिय भयाणं कित्तणेण सभपाई**
उवसं मतु ह्री स्वाहा। इति मन्त्रेण सर्पभयनिवारणं क्रियते।

उत्कलभाषायाम् - **वाण वाण अग्निवाण जाहाकुमारई वाण हृद फाटि जिव,**
प्राण न जाउ बोलि काहार राण श्रीदुर्गांक कोटि कोटि राण।।

एवं विविधभाषासु निबद्धानां मन्त्राणां प्रभावोऽव्यर्थ: दृश्यतेऽनुभूयते च तर्हिवैâमुतिकन्यायेन पवित्राणां वेदमन्त्राणां तन्त्रगतमन्त्राणां पौराणिकाणां वा मन्त्राणां का कथा। गङ्गाविष्णुश्रीकृष्णदासलक्ष्मीवेंकटेश्वरमुद्रणालयमुम्बईत:

सम्वत् -२०१४ (सन् १९५७) प्रकाशिते बालतन्त्रग्रन्थे विशेषत: बालानामाजन्मत: विविधरोगेभ्यो रक्षायै मन्त्रा: यन्त्राणि ओषधयश्चोपदिष्टा: सन्ति, ते तत्रैव द्रष्टव्या: नात्र विस्तारभिया सङ्गृह्यन्ते। आनुषङ्गत: सामान्यरोणां चिकित्सा सर्वेषां कृते मन्त्र-तन्त्र-यन्त्रै: समुपदिष्टाश्च सन्ति।

अधुना यन्त्रै: रोगनिदानं कृत्वा रोगे मूलकारणं ज्ञात्वा चिकित्सवैâ: रोगोपशमनाय व्यवस्था प्रदीयते। प्राचीनचिकित्सापद्धतौ गोरोचन-रक्तचन्दनादिपदार्थविशेषै: भूर्जपत्रादिषु लिखितै: आकृतिविशेषै: बीजाक्षरयन्त्रगतै: संख्यायुत्तैâर्वा यन्त्रै: रोगभयनिवारणाय कश्चित्प्रयोगविशेष: प्रचलित आसीत्। मुम्बईत: प्रकाशिते ''यन्त्रचिन्तामणिग्रन्थे'' मानवसुलसर्वविधकष्टानां निवृत्तये तद्द्वारा सुखलाभाय शताधिकयन्त्राणि उपदिष्टानि सन्ति। आकृतिविशिष्टेषु यन्त्रेषु पदार्थविशेषै: बीजाक्षरादि विन्यासपूर्वकं पूजने धारणे स्थापने च किमपि प्रभावविशेषं जनयति देहे गेहे वातावरणे चेति नाश्चर्यकरम्।

एवं मन्त्र-तन्त्र-यन्त्रादिभि: जीवने सौख्यलाभाय प्राचीनै: आचार्यै: व्यवस्था संस्थापिता वर्तते। तदिदानीं यान्त्रिके युगे जनै: विज्ञानसुलभोपायान् स्वीकृतत्वात् प्राचीना: प्रयोगा: भृशमुपेक्षिता:। परन्त्वधापि ये तानङ्गीकुर्वन्ति प्राचीनप्रयोगविशेषान् अवश्यन्ते उपकृता भवन्तीति नात्र संशीतिलेश:।

दुष्कर्मजा नृणां रोगा यान्ति चैव क्रमाच्छमम्।
जपै: सुरार्चनैहोमैर्दानैस्तेषां शमोभवेत्।।
पूर्वजन्म कृतं पापं नरकान्ते परिक्षयेत्।
वाधते व्याधिरूपेण तस्य कृच्छ्रादिभि: शम:।।
कृतकर्मक्षयो नास्ति कल्पकोटिशतैरपि।
अवश्यमेवभोक्तव्यं कृतं कर्म शुभाशुभम्।।
कुष्ठं च राज यक्ष्मा च प्रमेहो ग्रहणी तथा
मूत्रकृच्छ्राश्मरी कासा अतिसारभगन्दरौ
दुष्टव्रणं गण्डमाला पक्षाधातोऽक्षिनाशनम्
इत्येवमादयो रोगा महापापोद्भवा: स्मृता:।

(प्रायश्चित्तप्रकाशे कर्मविपाककाण्ड:) श्लोक-४-८, पृ.-९३.

सन्दर्भ -

१. निरुक्तम् - १.१.२
२. अवश्यमेव भोक्तव्यं कृतं कर्म शुभाशुभम्। नामुक्तं क्षीयते कर्म कल्पकोटिशतैरपि।। (गरु.म.पु.)
३. गरु.म.पु.
४. निरु. २.६.३.
५. श.क.दु. ६१७.
६. ई.सं.३.७.९
७. का.श्रौ.सू.-१.३.१
८. का.श्रौ.सू.- १.३.५

९. अर्थसंग्रह- पृ. २६०.

१०. जै.सू.- २.१.३२-३३.

११. वेदशा. पर्या.- पृ. ३.

१२. शब्द क.दुर्.- ६१५

१३. श.क.द्रु.- ६१५

१४. श.क.द्रु.- ६१५

१५. अकारादिक्षकारान्तमेकपञ्चाशदक्षरम्। एते वर्णा: प्रशस्यन्ते कामितार्थप्रदायका:। (तन्त्र सं. पटल-२, श्लोक सं-१.७१

१६. महाभा.-१३.४८.६.

१७. महाभा.- १.३.१४०.

१८. देवीभागवते- २.११.१९.

१९. महाभा.- १.१०३.२६.

२०. महाभ्विश्वसारतत्रम् श.क.द्रु-पृ.- ५८४.

२१. श.क.द्रु.- ५८४.

२२. देवी. भा.- ३.२६.२१.

२३. महाभारते श.क.द्रु.पृ.-१३.

२४. गीता- १८.६१.

२५. गीताया: श्रीधरस्वामीटीका।

२६. नारदीये- (श.क.द्रु.पृ.-१३)।

२७. योगिनीतन्त्रे (श.क.द्रु.पृ.-१३)।

२८. श.क.द्रु.पृ.-१३.

२९. श.क.द्रु.पृ.-१३.

३०. श.क.द्रु.पृ.-१६.

३१. दुर्गास-१२.२४.

३२. ॐ नमो करवलाई भरीतलाई जहाँ वैष्हनुमन्त आई, पचे न फूटे चले न नाल रक्षा करे गुरु गोख बाल।

ॐ णमो जिणायं गिय भयाणं कित्तणेण सभपाई उवसं मनु ह्री स्वाहा। (सर्यभयनिवारणमंत्र)

३३. शिव उवा च- यदाकस्योपरिराजा क्रुद्धो वांछति मारितुम्। तदा तन्मोहनाथीय दुष्टनिग्रहणाय च॥ रोचनाकुंकुमेनैव लिखेन्यन्त्रं तु भूर्जके ॥ (यन्त्रचिन्तामणि: पृष्ठ-१८)

३४. य.वि.सू.- १.१.

३५. य.वि.सू.- १.१४.

३६. य.वि.सू.- २.७.

३७. य.वि.सू.- २.३०.

३८. य.वि.सू.- ४.२५.

३९. श्रीमद्भागवतम्।

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Corrigendum

Dr. B.N. Maurya and Dr. Mahesh Gupta expressed in their email to the Chief Editor as below:

To,

The Chief Editor,
Sangyaharan Shodh.

Sub:- Request to withdraw an article published in Aug.2020 vol.23, no.02 title "A conceptual Analysis of Ancient Indian Resuscitative Measures"

Respected Sir,

We want to say that an article published in Aug.2020 vol.23, no. 02 title **"A conceptual Analysis of Ancient Indian Resuscitative Measures"** in sangyaharan Shodh is incomplete in manuscript regarding acknowledgement & reference.

So we both authors (Vaidya Dr.B.N.Maurya & Dr M.N.Gupta) want to withdraw the above mentioned article.

Thanking you with Regards

Vaidya (Dr.) Bhola Nath Maurya
Assistant Professor, Department of Sangyaharan,
Faculty of Ayurveda, Institute of Medical Science,
Banaras Hindu University, Varanasi, U.P, India.

Note: The article is under process to delete from website.

BHARATIYA SANGYAHARAK ASSOCIATION

(ASSOCIATION OF ANAESTHESIOLOGIST OF INDIAN MEDICINE)

MEMBERSHIP FORM

I wish to join **BHARATIYA SANGYAHARAK ASSOCIATION** as Life/Annual/Associate (Life/Annual)/Honorary member and enclose Cheque/Bank Draft/Money Order/Cash for Rs……..... towards subscription for the association, for the year……..

Full Name (in Block Letter) :…….....

Date of Birth & Sex :…….....

Qualifications :…….....

Designation/Profession :…….....

Permanent Residential Address with Tel. No.:…….....

E-mail ID :…….....

Present Address to which correspondence :…….....

to be sent :…….....

Specialty	:	Sangyaharan/Pain/Palliation	
Membership Fee	:	**Life Member**	**Annual Member**
Membership Fee Bonafide	:	Rs. 5000/-	Rs. 500/-
Associate Membership	:	Rs. 5000/-	Rs. 500/-

I agree to abide by the rules and regulation of the Bharatiya Sangyaharak Association.

Date: …… Signature_____

Correspondence Address: Bharatiya Sangyaharak Association, Section of Sangyaharan, Deptt. Of Shalya Tantra, I.M.S., B.H.U., Varanasi – 221005

☞ Out station cheques should be accompanied by Rs. 50/- as Bank charges. Cheque/Draft should be send in favor of Bharatiya Sangyaharak Association, Varanasi.

प्रकाशन सम्बन्धी नियम एवं निर्देश

1. पाण्डुलिपि ए-4 आकार पेपर पर डबल स्पेस में टंकित होना चाहिए।
2. **हिन्दी एवं संस्कृत भाषा में टंकित लेख** – क्रूतिदेव- 010/यूनिकोड (मंगल) फॉन्ट; शीर्षक-18 प्वाइंट ब्लैक, लेखक का नाम– 13 प्वाइंट ब्लैक, टेक्स्ट-14 प्वाइंट, फोलियों-11 प्वाइंट और पाद टिप्पणी 9 प्वाइंट में दें।
3. **अंग्रेजी भाषा में टंकित लेख** 'टाइम्स न्यू रोमन' फॉन्ट, शीर्षक-14 प्वाइंट आल कैप्स ब्लैक, लेखक का नाम-11 प्वाइंट ब्लैक, टेक्स्ट-12 प्वाइंट, पाद टिप्पणी और फोलियों- 9 प्वाइंट में दें।
4. शोध निबन्ध अधिकतम 06 पृष्ठ से अधिक नहीं होना चाहिए।
5. शोध निबन्ध मौलिक एवं प्रामाणिक होना चाहिए। किसी भी त्रुटि के लिए लेखक स्वयं जिम्मेदार होगा।
6. शोध निबन्ध में आवश्यक संशोधन का अधिकार प्रधान सम्पादक के पास सुरक्षित होगा।
7. शोध निबन्ध स्तरीय न होने की स्थिति में उसे अस्वीकार किया जा सकता है।
8. किसी भी शोध निबन्ध के कॉपी राईट का अधिकार प्रधान सम्पादक के पास सुरक्षित होगा।
9. उपर्युक्त निर्धारित नियम के विपरीत शोध निबन्ध स्वीकार नहीं किये जाएँगे।

❐

ज्ञान-विज्ञान विमुक्तये
आचार्य मनिष र. जोशी
सचिव
Prof. Manish R. Joshi
Secretary

सत्यमेव जयते

आज़ादी का अमृत महोत्सव

विश्वविद्यालय अनुदान आयोग
University Grants Commission
(शिक्षा मंत्रालय, भारत सरकार)
(Ministry of Education, Govt. of India)

F. No.:1-1/2018(CARE/JOURNAL) 25 आषाढ़ 1947/16 July, 2025

सार्वजनिक सूचना

This is in continuation of the Public Notice dated 11 February, 2025 to discontinue UGC-CARE listing of Journals, and develop suggestive parameters for choosing peer-reviewed journals by faculty members, students and the Higher Educational Institutions. It is informed that the Commission, in its 591st meeting held on 24 June, 2025, based on the feedback received from the various stakeholders, has considered and approved the following:

1. Suggestive Parameters for choosing Peer-Reviewed Journals **(Annexure-I)**
2. Uploading on the UGC website a list of 1474 UGC CARE listed journals as on 10 February, 2025, for referencing purposes to the stakeholders for all academic activities. This list of UGC-CARE Journals (now discontinued) is intended to serve as a reference resource only; the inclusion or exclusion of a journal in this list does not imply validation or endorsement by the Commission. Following is the link for the same:

   https://www.ugc.gov.in/e-book/Final_list_of_UGC-CARE_journals.pdf

All HEIs, faculty members, researchers, and students are requested to take due note of the above and adhere to these guidelines for all academic and research-related publication activities.

(मनिष जोशी)

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दूरभाष (Ph.): 011-23236288/23239337 | सम्पर्क सूत्र (ई-मेल) (E-mail) : secy.ugc@nic.in

Annexure-I

SUGGESTIVE PARAMETERS FOR PEER-REVIEWED JOURNALS

Higher Educational Institutions are committed to promoting high-quality research and disseminating it through publications in peer-reviewed journals. To achieve this goal, HEIs are encouraged to use the following suggestive parameters for peer-reviewed journals suitable to their specific needs, depending on the disciplines in which their faculty members work. The following parameters are provided as general guidelines to ensure the peer-reviewed journals' quality, transparency, and relevance.

1. Journal Preliminary Criteria

S.No.	Suggestive Parameters
1.1	**Journal Title**
1.2	**ISSN NUMBER** (Print and/or Online)
1.3	**Periodicity and Continuity** (Regular publication schedule)
1.4	**Contact and Publication Details** (Publisher information, address, and contact details)
1.5	**Transparent Review Policy** (Clear guidelines for peer review process)
1.6	**Website on a Certified Domain** (Secure and Professionally managed website)
1.7	**Open Access or Subscription-Based Policy** (Clear policy on access and fees)
1.8	**Integration with National/International Repositories** (Inclusion under ONOS or similar umbrellas)
1.9	**Archival Policy** (How the previous issues are maintained/made available)

2. Editorial Board Criteria

S.No.	Suggestive Parameters
2.1	**Editorial Board Details** (Names, affiliations, and expertise of editorial board members)
2.2	**Editorial Board composition** (Subject expertise, with eminent academicians/scientists/researchers)
2.3	**Efficient Editorial/Review Process** (Rigorous peer review, compliance with reviewers' recommendations, and clear timelines)

3. Journal Editorial Policy

S.No.	Suggestive Parameters
3.1	**Aims, Objectives, and Scope** (Clearly defined focus areas and goals of the journal)
3.2	**Subject Areas** (Specific fields covered by the journal)
3.3	**Article Processing Charges (APC)** (Transparent fee structure, if any)
3.4	**Publishing Timeline** (Average time from submission to publication)
3.5	**Acceptance Rate** (Percentage of submission accepted for publication)

4. Journal Quality Criteria – Content

S.No.	Suggestive Parameters
4.1	**Academic contribution** (Articles should demonstrate motivation, advancement of existing knowledge, and applicability for policymaking)
4.2	**Conformity to Journal Scope** (Articles must align with the journal's stated aims and objectives)

5. Journal Standards

S.No.	Suggestive Parameters
5.1	**Bibliographic Data & Literature Citation** (Accurate and standardized referencing)
5.2	**Font & Design** (Professional layout and readability)
5.3	**Infographics & Exhibits** (High-quality visuals and supplementary materials)
5.4	**Citation Record** (Journal articles cited in reputable databases)
5.5	**Print Continuum** (Consistency in print publication, if applicable)
5.6	**Quality of Website** (Well-maintained, regularly updated, and user-friendly)
5.7	**Multilingual Availability** (Relevance for Indian context, with content in Indian languages)

6. Research Ethics

S.No.	Suggestive Parameters
6.1	**Ethical Guidelines for Authors** (Clear guidelines for ethical publishing practices)
6.2	**Plagiarism Prevention** (Similarity score not exceeding standard limits)
6.3	**Conflict of Interest Disclosure** (No conflicts between governance, editorial board members, reviewers, and authors; any potential conflicts must be disclosed)
6.4	**AI Generated Content Policy** (Journal has specific policy with respect to use of AI)

7. Journal Visibility

S.No.	Suggestive Parameters
7.1	**Impact Factor or Similar Factor** (if applicable)
7.2	**Indexation in Reputed Databases** (Inclusion in renowned databases)

8. Journal Impact Criteria

S.No.	Suggestive Parameters
8.1	**Self-Citation Score** (Should be within a prescribed range compared to peer journals)
8.2	**Total Citation Rate** (As compared with similar peer-reviewed journals)
8.3	**Cite Score** (Journal's citation impact over a specific period)

Suggestions for HEIs

1. **Choice of Peer-Reviewed Journals:** Using the above parameters, faculty members and students may choose peer-reviewed journals tailored to their specific disciplines and research focus areas for publishing their research work.
2. **Internal review Committees:** HEIs may establish internal committee (s) to fine-tune the above-suggested parameters from time to time as needed in their specific cases to ensure they continue to meet the quality standards and to align with the institute's academic and research goals.