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REVIEW ARTICLE

Ayurvedic Approaches to PCOS-Associated Infertility: A Critical Review of Traditional Concepts, Clinical Evidence, and Therapeutic Challenges

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Abstract

Polycystic ovary syndrome (PCOS) is the commonest endocrine cause of ovulatory dysfunction in women of reproductive age and a leading contributor to anovulatory infertility. Many women in South Asia seek Ayurvedic care for menstrual irregularity and difficulty in conceiving, yet the evidence supporting Ayurvedic interventions in this setting has not been appraised critically. This critical narrative review examines classical Ayurvedic concepts relevant to female infertility — *Vandhyatva*, *Artava Dushti*, *Nashtartava*, *Agni*, *Dosha*, *Srotas* and *Garbha Sambhava Samagri* — alongside the contemporary pathophysiology of PCOS and the published clinical literature on Ayurvedic treatment. Literature was identified through targeted searches of PubMed/MEDLINE, the Cochrane Library, Google Scholar and indexed Ayurvedic journals, together with English editions of classical texts and current international PCOS guidance. The Ayurvedic literature is dominated by small single-arm studies and case reports. Menstrual and metabolic endpoints are reported far more consistently than ovulation, clinical pregnancy or live birth, and adverse events are rarely documented. No Ayurvedic intervention has been compared with placebo or guideline-directed ovulation induction in a trial powered to detect a difference in live birth. Interventions of demonstrated benefit remain individualised lifestyle management and ovulation induction, with letrozole or clomiphene as first-line agents. Ayurvedic approaches are therefore best positioned as supervised adjuncts within an integrative model, and their advancement requires randomised trials reporting fertility endpoints and reproductive safety.

Keywords: *Artava Dushti;* Ayurveda; Female Infertility; Integrative Reproductive Medicine Ovulatory Dysfunction; *Panchakarma*; Polycystic Ovary Syndrome; *Vandhyatva*

Introduction

Polycystic ovary syndrome is the commonest endocrine disorder of women of reproductive age, with pooled prevalence estimates of 6% under National Institutes of Health criteria and 10% under Rotterdam criteria,[1] and a global pooled estimate of 9.2% in a later synthesis.[2] Its cardinal features ovulatory dysfunction, hyperandrogenism and polycystic ovarian morphology — belong to a broader metabolic phenotype in which insulin resistance and compensatory hyperinsulinaemia are present in the great majority of affected women.[3] Approximately 4 of every five women presenting with anovulatory infertility meet diagnostic criteria for it.[4]

Terminology deserves attention before the evidence is examined. Polycystic ovarian disease is a descriptive sonographic label still used loosely in South Asian practice, whereas PCOS is a diagnostic syndrome requiring exclusion of thyroid dysfunction, hyperprolactinaemia, non-classical congenital adrenal hyperplasia and androgen-secreting tumours.[3,8] Conflating the two inflates apparent prevalence and weakens the interpretation of treatment studies. Infertility in PCOS is also rarely a purely gynaecological problem: affected pregnancies carry excess risks of gestational diabetes, hypertensive disorders and preterm delivery,[7] and the psychological burden of involuntary childlessness compound these clinical concerns.

Ayurvedic practice has long addressed childlessness, and PCOS-related subfertility is now among the commonest reasons for attending Ayurvedic gynaecology clinics in India and Sri Lanka.[13] What remains unresolved is whether these approaches alter the probability of conception rather than merely regularising cycles. This review therefore examines the classical conceptual framework, appraises the published clinical evidence with explicit attention to reproductive endpoints, and identifies the methodological and safety issues that must be resolved before Ayurvedic interventions can be recommended as infertility treatments. Sources were identified through targeted searches of PubMed/MEDLINE, the Cochrane Library, Google

Scholar and indexed Ayurvedic journals, together with current international PCOS guidance; because verse-level verification against a specified edition was not undertaken, classical citations are given at chapter level throughout, and this is acknowledged as a limitation.

Traditional Ayurvedic Understanding of Female Infertility

***Vandhyatva* and Reproductive Dysfunction** Infertility is discussed in the *Charaka Samhita (Chikitsa Sthana 30, Yonivyapad Chikitsa)* among the twenty *Yonivyapad*, where *Vandhyatva* (infertility) appears less as a disease entity than as the outcome of several reproductive disorders.[22] The classical emphasis falls on causation and constitution — abnormalities of the seed, the receptacle, the medium and the timing of conception rather than on ovarian morphology. This is an aetiological and holistic frame, and it is not a diagnostic category that can be mapped onto a syndrome.

***Artava Dushti* and Menstrual Irregularities-** Classical texts describe *Artava Dushti* (disorders of menstrual or reproductive function) in terms of quantity, rhythm, quality and associated pain, and distinguish patterns such as *Artava Kshaya* (diminished menstrual flow) from *Nashtartava* (absence or suppression of menstruation) and *Anartava*. Because oligomenorrhoea is the presenting complaint in most women with PCOS, these descriptions invite comparison, and *Artava Kshaya* has been used as the entry category in Ayurvedic PCOS studies.[13,15]

The resemblance is nonetheless superficial: the classical categories describe symptom clusters and doshic patterns, not ovulatory status, androgen excess or ovarian reserve, and they do not isolate a single clinicopathological entity.

Role of *Dosha*, *Agni* and *Srotas*- Traditional reasoning attributes such presentations to *Kapha–Vata* predominance, to impaired *Agni* (digestive and metabolic principle) with accumulation of Ama, and to obstruction of *Srotas* (functional channels), notably the *Artavavaha* Srotas.[24] Adiposity (*Medovriddhi*) is recognised as both cause and consequence of this sequence. These are functional and relational explanations; insulin signalling and ovarian steroidogenesis are mechanistic ones. They operate in different conceptual domains, and treating Agni as a synonym for insulin resistance is an over-literal translation rather than an established equivalence.

***Garbha Sambhava Samagri* -** The four requisites for conception described in the *Sushruta Samhita (Sharira Sthana 2)* — *Ritu* (timing), *Kshetra* (the receptacle), *Ambu* (the nourishing medium) and *Beeja* (the seed) — retain practical value as a checklist.[23] They direct attention to the timing of intercourse, uterine and tubal competence, the cervical and endometrial milieu, and gamete integrity. Read clinically, they mandate evaluation of the partner, of tubal patency and of the uterine cavity, and it is precisely this breadth that single-modality Ayurvedic case series tend to omit.

Table 1. Classical Ayurvedic Concepts and Their Potential Relevance to PCOS-Associated Infertility

Classical concept	Traditional description	Potential contemporary clinical relevance	Limitations of correlation
Vandhyatva[22]	Infertility discussed among the twenty Yonivyapad as an outcome of reproductive disorder rather than a single disease	Frames infertility as multifactorial; supports broad aetiological enquiry	No clinicopathological entity; cannot be equated with PCOS-related anovulation
Artava Dushti / Artava Kshaya[13,14,15]	Disorders of menstrual quantity, rhythm, quality and associated pain; diminished flow described separately	Symptom-level parallel with oligomenorrhoea; used as study entry category in Ayurvedic PCOS trials	Describes symptoms, not ovulatory status, androgen excess or ovarian reserve
Nashtartava / Anartava[13]	Absence or suppression of menstruation (Sushruta; Anartava in Vagbhata)	Parallel with amenorrhoea in PCOS	No endocrine or USG correlate; aetiology not specified
Agni and Ama[3,6]	Digestive and metabolic principle; impaired Agni with Ama accumulation	Conceptual parallel with metabolic dysfunction and insulin resistance	Functional-relational concept; equivalence with insulin signalling unproven
Dosha (Kapha–Vata) [8]	Derangement of Kapha and Vata with Medovriddhi (adiposity)	Resonance with obese phenotype and metabolic burden	Constitutional model; no correspondence with phenotype classification
Srotas (Artavavaha) [24]	Obstruction of channels subserving Artava; injury described as causing infertility	Analogy with impaired follicular development and ovulatory signalling	Anatomical mapping onto the hypothalamic–pituitary–ovarian axis unjustified
Garbha Sambhava Samagri[23]	Ritu, Kshetra, Ambu, Beeja as requisites for conception	Checklist supporting evaluation of timing, tubal patency, uterine cavity, endometrium and gamete quality	Not a diagnostic test; requires biomedical substantiation in practice

Contemporary Understanding of PCOS-Associated Infertility

Anovulation in PCOS reflects arrest of follicular maturation under excess intrafollicular androgen, amplified by insulin acting as a co-gonadotropin at the ovarian level.[6] Insulin resistance is present independent of body mass index, and a substantial minority of affected women are lean, with a hormonal profile that may be at least as deranged as that of obese women despite lower insulin resistance.[12] Menstrual irregularity, hyperandrogenism & polycystic morphology are expressions of a systemic disorder, & the endometrium & obstetric course are part of the clinical picture.[7]

Infertility in PCOS is multifactorial, and not every affected woman is infertile; many ovulate intermittently and conceive without intervention. The probability of conception depends on the degree of anovulation, age, ovarian reserve and body weight, and also on male, tubal and uterine factors that PCOS neither causes nor excludes. Comprehensive assessment accordingly includes semen analysis, assessment of tubal patency and exclusion of thyroid and prolactin disorders before any ovulation-directed therapy is begun.[3,5]

Current guidance places individualised lifestyle management first, followed by pharmacological ovulation induction.[4,5] Letrozole is recommended as first-line therapy in anovulatory PCOS: in a double-blind multicentre trial of 750 women, cumulative live birth was 27.5% with letrozole versus 19.1% with clomiphene (rate ratio 1.44, 95% CI 1.10–1.87), with cumulative ovulation of 61.7% versus 48.3%,[9] and a network meta-analysis of 54 trials confirmed higher live birth with letrozole than with clomiphene (OR 1.67, 95% CI 1.11–2.49).[10] Lifestyle intervention, by contrast, improves the free androgen index, weight and body mass index on low-quality evidence, and no trial in that synthesis reported live birth.[11] These are the benchmarks against which any adjunctive therapy must be judged.

Ayurvedic Therapeutic Approaches in PCOS-Associated Infertility

A recent scoping review identified 57 published Ayurvedic studies in PCOS — 32 case studies, 13 randomised controlled trials, 9 pre–post trials, 2 case series and 1 non-randomised trial — with *Shatapushpa* and *Krishnatila* the most used single drugs, *Kanchanara Guggulu* and *Rajapravartini Vati* the most used compound formulations, and Basti the most used complex intervention.[13] That distribution itself signals the evidentiary problem: a field built largely on individualised, multi-component case reports is difficult to evaluate and almost impossible to replicate.

Shamana Chikitsa

Shamana Chikitsa (palliative or pacifying treatment) uses oral formulations selected to pacify *Kapha* and *Vata*, to promote *Artava Pravartana* (restoration of menstrual flow) and to reduce Meda (adipose tissue). *Shatapushpa* is classically regarded as *Artavajanana* and *Kanchanara Guggulu* as *Medohara* and *Granthihara*; both are the formulations most frequently used in the published literature.[13] The rationale is coherent within its own system, but the evidence consists of small, open-label, often single-arm studies with heterogeneous formulations, and no formulation has been tested against a guideline comparator with live birth as the endpoint. Herbo-mineral preparations also carry quality-control obligations discussed in Section 6.

Panchakarma Interventions

Panchakarma (a group of traditional Ayurvedic therapeutic procedures) is used with the stated aims of *Srotoshodhana* (cleansing of channels) and *Ama Pachana*. *Vamana* (therapeutic emesis) is directed at *Kapha*, *Virechana* (therapeutic purgation) at *Pitta*, and Basti (medicated enema therapy) at *Vata; Uttara Basti* is a specialised urogenital administration route used in several published fertility protocols. The published record is thin: a single-arm study of 15 women given Vamana with *Ikshwaaku Beeja* followed by *Shatapushpadi Ghanavati* reported improvement in menstrual irregularity, body mass index, antral follicle counts, fasting glucose and hirsutism, without any reported pregnancy outcome.[15] *Uttara Basti* is an invasive procedure carrying risks of infection, trauma and, if improperly performed, uterine injury; it requires asepsis, a trained operator and explicit informed consent, and cannot be described as routine or universally safe.

Dietary and Lifestyle Interventions

Classical *Ahara* (diet) and *Vihara* (lifestyle) advice — *Laghu* and *Tikta–Katu* foods, avoidance of *Viruddha Ahara*, regular *Vyayama*, avoidance of day sleep and of night waking — overlaps substantially with contemporary lifestyle prescription. The convergence is genuine but

incomplete. Cochrane synthesis of 15 trials (498 participants) found that lifestyle intervention may reduce weight (−1.68 kg), body mass index (−0.34 kg/m²) and the free androgen index (−1.11), with uncertain effects on glucose tolerance and no data on live birth, miscarriage or menstrual regularity.[11] Weight management must be individualised: caloric restriction is inappropriate for lean women with PCOS, in whom weight maintenance rather than loss is the objective.[12]

Yoga and Stress Management

Yoga has been evaluated more rigorously than most Ayurvedic interventions. In a randomised active-controlled trial of 90 adolescents with PCOS, twelve weeks of a holistic yoga module reduced anti-Müllerian hormone, luteinising hormone, testosterone and hirsutism scores and improved menstrual frequency compared with matched physical exercise, while body weight and body mass index did not differ between groups.[17] A systematic review of 11 studies (515 participants), pooling two trials, reported improvements in menstrual irregularity, clinical hyperandrogenism, fasting glucose, fasting insulin and HOMA-IR, graded as low-quality evidence.[18] Neither analysis assessed conception. Improvement in metabolic or psychological parameters is not evidence of restored fertility, and it should not be presented as such.

Clinical Evidence and Reproductive Outcomes

The most frequently cited Ayurvedic study in this field enrolled 40 women with subfertility and PCOS using purposive sampling and delivered a 3-stage regimen over six months, combining oral formulations, dietary advice and monthly *Uttara Basti* with *Shatapushpa* oil.[14] The authors reported that 85% were "cured" of PCOS and 75% conceived by the end of treatment, with 85% having conceived by the end of a 12-month follow-up. The study had no comparator, did not define "cure", reported no ovulation data and no adverse events, and its pregnancy rates exceed those observed in controlled trials of ovulation induction in larger populations.[9] Spontaneous conception, regression to the mean, concurrent lifestyle change & expectancy cannot be excluded.

A second single-arm study of 15 women reported significant improvement in menstrual irregularity, body mass index, follicle counts, fasting glucose and hirsutism after two months of *Vamana* followed by *Shatapushpadi Ghanavati*.[15] No pregnancy outcome was reported, although the conclusion refers to increasing the chances of conception — a claim the data do not support. A published case report describes a 32-year-old woman with eleven years of primary infertility and previous unsuccessful intrauterine insemination who conceived eight months into combined *Shodhana* and *Shamana* treatment and delivered a healthy infant;[16] she also lost 20 kg, which is itself a plausible determinant of restored ovulation.

Methodological appraisal across this literature is consistent. A systematic review of nutritional supplements and herbal medicines in PCOS included 24 randomized trials (1406 women), judged that no single study carried a low risk of bias, and concluded that there is no high-quality evidence of effectiveness and that evidence of safety is lacking.[19] In the Ayurvedic scoping review, reproductive outcomes were the most studied, but menstruation, infertility and ovarian morphology were defined inconsistently, and the authors identified rigorous safety and adverse-event reporting as an outstanding gap.[13] The critical issue is one of outcome hierarchy: menstrual regularity, ovulation, conception, clinical pregnancy and live birth are distinct endpoints, and improvement in the first cannot be assumed to imply the last. Almost no study in this literature reports live birth per woman randomized, because almost none has a randomized design.

Therapeutic Challenges and Safety Considerations

Several structural problems limit clinical interpretation. Interventions are multi-component and individualised, so the contribution of any single drug or procedure cannot be isolated; formulations are rarely standardised or chemically fingerprinted; diagnostic entry criteria range from the Rotterdam consensus to a sonographic report of "PCOD" to a classical label such as Artava Kshaya; treatment duration varies from six weeks to beyond six months; and comparators, blinding and sample-size calculations are largely absent. Follow-up is short, so late miscarriage, obstetric outcomes and neonatal health go unobserved.

Safety receives insufficient attention. In an analysis of 70 Ayurvedic herbal medicine products manufactured in South Asia, 20% contained lead, mercury and/or arsenic at concentrations that could exceed regulatory limits at recommended doses,[20] which makes batch testing and

disclosure an obligation rather than an option for any product used by women attempting conception.

Table 2. Published Clinical Studies of Ayurvedic Interventions in PCOS and Associated Infertility

Classical concept	Design	Population & sample	Intervention	Comparator	Duration	Reported outcomes	Major limitations
Dayani Siriwardene *et al.*, 2010[14]]	Single-arm clinical study, purposive sampling	40 women with subfertility and PCOS	Three-stage oral regimen *(Triphala, Chandraprabha, Manibhadra; Shatavari, Shatapushpa, Guduchi, Krishna Jeeraka; Atibala, Shatapushpa, Rasayana Kalpa)* + monthly *Uttara Basti* with *Shatapushpa* oil and dietary advice	None	6 months; 12-month follow-up	Menstrual regularity, dysmenorrhoea, BMI, LH/FSH; 75% conceived by end of treatment; 85% by end of follow-up (as reported); 85% stated to be 'cured' of PCOS	No control group; 'cure' undefined; no ovulation data; no adverse events; multi-component regimen not attributable; small sample
Bhingardive *et al.*, 2017 [15]	Prospective, open-label, single-arm interventional study	15 women with PCOS (*Artava Kshaya*)	*Vamana Karma* with *Ikshwaaku Beeja, Samsarjana Krama, then Shatapushpadi Ghanavati* 1 g twice daily	None	2 months	Menstrual irregularity, obesity, BMI (P<0.0001); reduced antral follicles, fasting glucose and hirsutism score	No control group; small sample; no pregnancy or live-birth outcome reported despite conclusion referring to conception
Nidhi *et al.*, 2013 [17]	Prospective randomised active-controlled trial	90 adolescents (15–18 years) meeting Rotterdam criteria	Holistic yoga module, 1 hour daily	Matched physical exercise	12 weeks	Reduced AMH, LH, LH/FSH ratio, testosterone and hirsutism score; improved menstrual frequency; no difference in BMI	Adolescent population; no fertility endpoint; yoga rather than classical Ayurvedic pharmacotherapy; single centre
Asmabi and Jithesh, 2022 [16]	Case report	One woman, 32 years, primary infertility of 11 years with PCOS; previous unsuccessful intrauterine insemination	Shodhana and Shamana: Snehapana, Abhyanga, Vamana, Virechana, Anuvasana and Lekhana Basti, Uttara Basti, with oral formulations and diet/lifestyle advice	None	8 months to conception	20 kg weight loss (BMI 34.9 to 27.4), restored menstrual regularity, conception at 8 months, live birth at term by caesarean section	Single case; no control; extensive co-intervention; weight loss a plausible independent determinant; not generalisable

Herb–drug interactions are a recognized concern in Ayurvedic practice and become particularly relevant when herbal therapy is combined with metformin, ovulation-induction agents or thyroid medication.[21] Reproductive toxicity data are largely unavailable, and the safety of continuing many classical formulations during conception and early pregnancy is uncertain. The most consequential harm, however, may be indirect: deferral of effective ovulation induction or of assisted reproduction while unproven therapy is pursued. Appropriate supervision, concurrent fertility evaluation and timely referral are therefore integral to safe practice.

Opportunities for Integrative Reproductive Healthcare

Collaboration between Ayurvedic practitioners and reproductive endocrinologists is justified where it adds measurable value rather than substituting for effective care. Three areas stand out. First, lifestyle and dietary counselling: guideline first-line management is behavioural, time-intensive and poorly resourced, and Ayurvedic practitioners are well placed to deliver structured diet, activity, sleep and stress counselling within an individualised consultation.[5,11] Second, metabolic case-finding: body mass index, waist circumference, blood pressure, fasting glucose or oral glucose tolerance testing and lipid assessment can be undertaken systematically in Ayurvedic clinics, with referral for abnormalities. Third, psychological support and stress management, where yoga and structured relaxation carry low-risk evidence for metabolic and psychological outcomes.[17,18]

These opportunities depend on standardized documentation of both diagnostic frameworks, shared decision-making that states the strength of evidence

honestly, defined referral pathways and participation in pharmacovigilance.[21] Adjunctive use under supervision is a defensible clinical position; substitution is not, and the distinction should be stated explicitly to patients rather than left implicit.

Future Research Priorities

Progress requires a change in study architecture rather than more case series. Randomized controlled trials should be powered for live birth per woman randomized, with ovulation confirmed prospectively by follicular tracking or mid-luteal progesterone, and with pregnancy, miscarriage, clinical pregnancy, ongoing pregnancy, live birth and neonatal outcomes reported separately. Entry criteria should follow the international evidence-based guideline, with Ayurvedic assessment documented alongside rather than instead of it, and phenotype stratification should be planned in advance so that lean and obese women are not pooled uncritically.[5,12]

Intervention reporting requires equal rigour: botanical authentication and marker-compound assay, heavy-metal screening, batch and manufacturer disclosure, and manualized protocols for multi-component regimens so that replication becomes possible. Comparator choice should follow the question — placebo for proof of mechanism, letrozole or clomiphene for comparative effectiveness, and lifestyle care where that is the accepted first-line standard.[4,9] Prospective registration in the CTRI or ClinicalTrials.gov, multicentre collaboration between Ayurvedic institutions and reproductive medicine units, and long-term maternal and child follow-up would materially improve credibility. Finally, trials must report adverse events systematically, including events during early pregnancy, since this is the domain in which current evidence is weakest.[13,19]

Table 3. Therapeutic Challenges and Future Research Priorities in Ayurvedic Management of PCOS-Associated Infertility

Current challenge	Clinical or methodological implication	Recommended research approach	Relevant outcome measures
Heterogeneous, individualised multi-component interventions	Effect of any single drug or procedure cannot be isolated; replication limited	Manualised protocols; factorial or dismantling designs where feasible	Component-attributable ovulation and pregnancy rates
Unstandardised formulations and herbo-mineral products	Batch-to-batch variation; heavy-metal and contamination risk	Botanical authentication, marker-compound assay, heavy-metal screening, batch disclosure	Product quality metrics; adverse-event rates
Inconsistent diagnostic entry criteria (Rotterdam vs 'PCOD' vs Artava Kshaya)	Populations not comparable across studies; prevalence and effect estimate unreliable	Guideline-based entry criteria with Ayurvedic assessment documented alongside	Proportion meeting Rotterdam criteria; phenotype distribution
Predominance of single-arm and case-report designs	Regression to the mean, expectancy and co-intervention cannot be excluded	Randomised controlled trials with concealed allocation and blinded outcome assessment	Live birth per woman randomised
Outcome hierarchy collapsed (menstrual change read as fertility gain)	Overstatement of reproductive benefit	Pre-specified, hierarchical endpoints reported separately	Ovulation, conception, clinical pregnancy, ongoing pregnancy, live birth
Ovulation rarely assessed prospectively	Anovulation may persist despite regular bleeding	Serial follicular tracking or mid-luteal progesterone	Ovulatory rate per cycle
Short follow-up and absent obstetric/neonatal data	Late miscarriage and perinatal outcomes unobserved	Follow-up to delivery and infancy	Miscarriage, gestational diabetes, hypertensive disorders, preterm birth, birth weight
Inadequate safety and pharmacovigilance reporting	Herb–drug interactions and reproductive toxicity unrecognised	Systematic adverse-event capture, including early pregnancy; interaction studies	Adverse events; liver and renal parameters; interaction pharmacokinetics
Lean PCOS underrepresented	Caloric restriction may be inappropriate; findings not transferable	Pre-specified phenotype stratification	Ovulation and metabolic outcomes by BMI stratum

Discussion

The classical Ayurvedic framework and contemporary reproductive endocrinology approach PCOS-associated infertility from different directions. The former is constitutional, individualized and centred on digestion, lifestyle and channel function; the latter is mechanistic and stratified by phenotype, with endpoints defined in biochemical and obstetric terms. The first offers a coherent rationale for behavioral intervention, which is precisely what guidelines recommend first; it does not offer a validated mechanism for restoring ovulation, and the attempt to translate *Agni* into insulin resistance or *Srotas* into the hypothalamic–pituitary–ovarian axis obscures more than it explain.

Read against the evidence, oral formulations and *Panchakarma* protocols remain unproven for fertility.

The studies reviewed are small, uncontrolled and heterogeneous, and where weight loss occurred — as in the reported case [16] — the observed reproductive benefit is at least as likely to reflect the metabolic consequences of weight reduction as any specific pharmacological effect. *Yoga*, evaluated in randomized trials, shows reproducible improvements in menstrual frequency and metabolic parameters but has never been tested for conception.[17,18] Symptom benefit is real, but it is not the outcome that patients consulting for infertility seek.

Three conclusions follow. Ayurvedic interventions should be described as adjunctive and unproven for fertility, not as alternatives to ovulation induction. Safety surveillance, product quality assurance and attention to herb–drug interactions should be treated as clinical prerequisites.[20,21] And the field should be judged by its next generation of trials rather than by its current case series.

Conclusion

Ayurvedic medicine offers a coherent traditional account of menstrual and reproductive dysfunction and a practical, individualized framework for diet, lifestyle and stress-related care that overlaps with guideline first-line management. Its clinical evidence in PCOS-associated infertility, however, consists chiefly of small uncontrolled studies and case reports in which menstrual and metabolic changes are reported more consistently than ovulation, clinical pregnancy or live birth, and in which safety data are largely absent. No Ayurvedic intervention can presently be regarded as an established treatment for PCOS-related infertility. Collaborative, adequately powered randomised trials with fertility-specific endpoints, authenticated formulations and prospective safety monitoring are required before such claims can be made responsibly.

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