

## Ayurvedic Vaginal Drug Delivery Systems: A Conceptual Review of *Yoni Pichu*, *Yoni Varti* and *Yoni Dhavana* in Women's Health

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### Abstract

Vulvovaginal infections, cervicitis, vaginal dryness, and the broader spectrum of conditions Ayurveda terms *Yonivyapad* remain among the most frequently encountered gynecological complaints worldwide. Modern medicine increasingly favors localized vaginal drug delivery, since it concentrates therapeutic action at the diseased site, limits systemic side effects, and improves bioavailability and adherence. Ayurveda anticipated these principles through *Yoni Pichu*, *Yoni Varti*, and *Yoni Dhavana* — local therapies using medicated oils, ghee, herbal pastes, decoctions, or suppository-like preparations that share substantial conceptual ground with modern drug-delivery science.

To examine the Ayurvedic concepts of *Yoni Pichu*, *Yoni Varti*, and *Yoni Dhavana* against the principles of modern vaginal drug delivery.

Classical Ayurvedic sources — *Charaka Samhita*, *Sushruta Samhita*, *Ashtanga Hridaya*, *Kashyapa Samhita*, and other authoritative texts — were reviewed alongside contemporary literature identified through PubMed, Google Scholar, Scopus, and the AYUSH Research Portal, using search terms including Ayurveda, *Yoni Pichu*, *Yoni Varti*, *Yoni Dhavana*, vaginal drug delivery, local drug delivery, and mucoadhesive drug delivery.

Beneath their classical terminology, Ayurvedic vaginal therapies function as fairly sophisticated local drug-delivery approaches built around prolonged retention, sustained action, and direct contact with diseased tissue — the same goals pursued by modern vaginal gels, suppositories, creams, rings, and mucoadhesive systems. The parallels are substantial, though standardization, quality control, and clinical evidence in Ayurvedic practice remain works in progress.

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*Yoni Pichu*, *Yoni Varti*, and *Yoni Dhavana* show real promise as traditional localized drug-delivery systems, and bringing them into dialogue with modern pharmaceutical concepts could help move Ayurvedic formulations for women's reproductive health toward safer, more standardized, evidence-based practice.

**Keywords:** Ayurveda, *Yoni Pichu*, *Yoni Varti*, *Yoni Dhavana*, Vaginal Drug Delivery, Novel Drug Delivery System, Women's Health

**A**bnormal vaginal discharge, vulvovaginal infections, cervicitis, vaginal dryness, and various inflammatory conditions together account for a large share of gynecological consultations worldwide, and many demand prolonged treatment for which conventional systemic therapy is often suboptimal — target-site drug concentration falls short, systemic side effects accumulate, and compliance suffers. Localized vaginal drug delivery has developed to close this gap, using dosage forms such as creams, gels, tablets, suppositories, films, and vaginal rings that exploit the route's rich vascularity, large absorptive surface, and avoidance of first-pass hepatic metabolism for sustained, site-specific action.

Ayurveda anticipated much of this reasoning. For centuries it has described localized vaginal therapy — *Yoni Pichu*, *Yoni Varti*, and *Yoni Dhavana* — using medicated oils, ghee, herbal formulations, or decoctions placed directly in the vaginal canal to manage *Yonivyapad*, the broad Ayurvedic category of gynecological disorders, while also aiming to restore Doshic balance and support tissue healing. Despite extensive classical description, these procedures have drawn comparatively little scholarly attention to their pharmaceutical rationale, even though their core principles — prolonged retention, direct application to the affected site, localized action — echo the

objectives of contemporary vaginal drug delivery. This review therefore examines *Yoni Pichu*, *Yoni Varti*, and *Yoni Dhavana* against the pharmaceutical principles of localized vaginal drug delivery, in the hope of building a scientific case for standardized Ayurvedic vaginal drug delivery systems in women's healthcare.

This narrative review evaluates Ayurvedic vaginal drug delivery systems alongside contemporary pharmaceutical principles. Classical material was drawn from authoritative Ayurvedic texts — *Charaka Samhita*<sup>1</sup>, *Sushruta Samhita*<sup>22</sup>, *Ashtanga Hridaya*<sup>23</sup>, *Kashyapa Samhita*<sup>26</sup>, *Bhaishajya Ratnavali*<sup>10</sup>, and *Yogaratanakara*<sup>27</sup> — together with standard textbooks of Prasuti Tantra evum Stri Roga and Bhaishajya Kalpana, with particular attention to passages on *Sthanika Chikitsa*, *Yonivyapad*, *Yoni Pichu*, *Yoni Varti*, and *Yoni Dhavana*. On the modern side, PubMed, Google Scholar, Scopus, and the AYUSH Research Portal were searched for English-language articles published up to 2026, using combinations of the keywords Ayurveda, *Yoni Pichu*, *Yoni Varti*, *Yoni Dhavana*, vaginal drug delivery, local drug delivery, novel drug delivery system, mucoadhesive drug delivery, and women's reproductive health.

### *Modern Perspective of Vaginal Drug Delivery :*

#### *Concept of Vaginal Drug Delivery :*

Vaginal drug delivery places therapeutic agents directly into the vaginal cavity, aiming for local action, systemic effect, or both.<sup>25</sup> Its appeal to modern pharmaceuticals owes much to the vagina's own anatomy — a densely vascularized mucosal membrane, a comparatively large absorptive surface, freedom from hepatic first-pass metabolism, and self-administration.<sup>2</sup> Together these features support efficient absorption with fewer systemic side effects, raising drug concentration at the diseased site while keeping systemic exposure low — improving efficacy, allowing less frequent dosing, and supporting adherence in vulvovaginal candidiasis, bacterial vaginosis, cervicitis, vaginal atrophy, sexually transmitted infections, and other inflammatory conditions. The vaginal mucosa's rich vascular supply also allows hormones and other agents to enter systemic circulation directly, sidestepping gastrointestinal

degradation and hepatic first-pass metabolism,<sup>11</sup> extending the route's use well beyond conventional gynecological indications.

#### *Anatomical and Physiological Basis :*

Structurally, the vagina is a fibromuscular canal running from cervix to vulva, lined with stratified squamous, non-keratinized epithelium.<sup>4</sup> A highly vascular connective tissue beneath this lining allows therapeutic agents to diffuse quickly, and minimal digestive enzymatic activity keeps locally administered drugs stable. In healthy women of reproductive age the environment stays acidic — roughly pH 3.8 to 4.5 — largely through *Lactobacillus* metabolism,<sup>15</sup> which restrains pathogenic organisms and preserves vaginal homeostasis; disturbance of pH or flora predisposes to infection and inflammation. How well a drug crosses the vaginal mucosa depends on molecular weight, lipophilicity, formulation, residence time, secretions, and epithelial status, making dosage-form selection a determinant of therapeutic outcome.

Table-1. Anatomical features supporting Vaginal Drug Delivery

| Feature                          | Pharmaceutical Significance                  |
|----------------------------------|----------------------------------------------|
| Rich vascular supply             | Rapid absorption of therapeutic agents       |
| Large mucosal surface            | Increased area for drug diffusion            |
| Absence of first-pass metabolism | Improved bioavailability                     |
| Acidic vaginal pH                | Protection against pathogenic microorganisms |
| High tissue permeability         | Efficient localized drug delivery            |
| Ease of administration           | Better patient compliance                    |

#### *Advantages and Limitations :*

Compared with oral or parenteral administration, applying medication locally delivers a high concentration directly to diseased tissue, producing rapid therapeutic action with

less systemic toxicity, while bypassing hepatic first-pass metabolism markedly improves bioavailability. Mucoadhesive formulations add prolonged residence time,<sup>24</sup> sustaining drug release and improving efficacy,<sup>7</sup> and since the route is non-invasive, painless, and generally

well accepted, it suits chronic gynecological conditions requiring repeated local treatment. These benefits come with real constraints, however: variations in vaginal pH, menstrual cycle, hormonal status, secretions, and anatomical differences all influence absorption, while formulation leakage, discomfort, cultural acceptability, and compliance can undermine a poorly designed product — constraints that

continue to push research toward better mucoadhesion, more controlled release, and longer vaginal retention.

#### *Modern Vaginal Dosage Forms :*

Pharmaceutical science has responded with a range of dosage forms tailored to different therapeutic requirements<sup>3,12,13</sup> (Table-2).

Table-2. Modern Vaginal Dosage Forms

| <b>Dosage Form</b>                   | <b>Characteristics</b>               | <b>Examples</b>           |
|--------------------------------------|--------------------------------------|---------------------------|
| Vaginal Creams                       | Easy application; local drug action  | Clotrimazolecream         |
| Vaginal Gels                         | Improved spreadability and retention | Metronidazole gel         |
| Vaginal Tablets                      | Accurate dosing                      | Clotrimazole tablet       |
| Vaginal Suppositories<br>(Pessaries) | Melt or dissolve after insertion     | Miconazolepessary         |
| Vaginal Rings                        | Sustained drug release               | Hormonal vaginalring      |
| Mucoadhesive Films                   | Controlled drug release              | Experimental formulations |

#### *Emerging Trends in Vaginal Drug Delivery : Ayurvedic Perspective of Vaginal Drug Delivery:*

More recently, pharmaceutical science has moved toward mucoadhesive nanoparticles, liposomes, microspheres, hydrogels, thermosensitive gels, and bioadhesive polymeric systems as vaginal delivery platforms,<sup>9</sup> chasing greater drug stability, longer residence time, better mucosal penetration, and sustained effect with fewer doses.<sup>8</sup> These objectives sound familiar: prolonged local contact, direct application, and sustained action are exactly what Ayurveda has emphasized for centuries through *Yoni Pichu*, *Yoni Varti*, and *Yoni Dhavana* — a resemblance that invites their reinterpretation through modern pharmaceutical science.

#### *Concept of Sthanika Chikitsa in Stri Roga :*

Ayurveda's approach to gynecological disorders is not confined to systemic treatment; it emphasizes both *Shodhana* (purificatory therapies) and *Shamana* (pacifying therapies), and the classics specifically advocate *Sthanika Chikitsa*, or local therapy, for conditions affecting the female reproductive tract. Applied locally, medicine acts directly on the affected tissue, easing pain, itching, discharge, inflammation, and dryness more quickly and without unnecessary systemic exposure. The classics describe several such local procedures — *Yoni Pichu*, *Yoni Varti*, *Yoni Dhavana*, *Yoni Prakshalana*, *Uttarabasti*, and *Yoni*

*Lepa* — each chosen according to the predominant *Dosha*, the nature of the disease, and the patient's own constitution. Pharmaceutically, these represent different modes of localized delivery: medicated oils, ghee, herbal decoctions, powders, and semisolid formulations placed directly in the vaginal canal, where prolonged contact with diseased tissue concentrates the drug at the target site while supporting tissue healing, easing inflammation, and restoring the normal vaginal environment — objectives that line up closely with modern vaginal drug delivery's emphasis on targeted administration, prolonged residence, sustained release, and enhanced local bioavailability.

#### *Concept of Yonivyapad :*

Ayurveda groups diseases of the female reproductive system under the broad term *Yonivyapad*. Healthy reproductive function depends on a balance of *Vata*, *Pitta*, and *Kapha Doshas* together with adequate nourishment of *Rasa Dhatu* and *Artava*; when diet, lifestyle, infection, trauma, or other etiological factors disturb this balance, some form of *Yonivyapad* results, presenting as abnormal discharge (*Yoni Srava*), itching (*Kandu*), pain (*Vedana*), burning (*Daha*), foul odor, inflammation, dryness, or dyspareunia. Because these signs point to pathology localized in the tissue itself, they justify local intervention alongside systemic management. Treatment is patient-specific, guided by the predominant *Dosha*, disease stage, and tissue status: depending on what is found, *Yoni Pichu*, *Yoni Varti*, or *Yoni Dhavana* may be recommended to ease symptoms, promote healing, and restore normal vaginal physiology — a selection process not unlike choosing a modern

vaginal dosage form by disease condition, drug properties, and desired outcome.

#### *Yoni Pichu :*

Among the local procedures of Ayurvedic gynecology, *Yoni Pichu* is probably the most frequently described. The term *Pichu* denotes a sterile cotton swab or tampon soaked in medicated oil (*Taila*) or ghee (*Ghrita*), gently placed in the vaginal canal and left in position for a prescribed duration. It is indicated for *Vata*-predominant conditions, vaginal dryness, inflammation, pain, cervical erosion, non-specific vaginitis, and delayed wound healing. Efficacy depends largely on the pharmacological properties of the oil or ghee used: qualities such as *Snigdha* (unctuous), *Sukshma* (subtle), *Vyavayi* (rapidly spreading), and *Vikasi* (diffusible) allow deeper tissue penetration, pacify aggravated *Vata Dosha*, ease inflammation, and restore normal physiology. Commonly used preparations include *Jatyadi Taila*, *Bala Taila*, *Yastimadhu Taila*, *Triphala Taila*, and *Shatadhauta Ghrita*.<sup>19</sup> In practice, after cleansing the external genitalia, a sterile cotton swab soaked in lukewarm medicated oil is inserted aseptically and retained, extended mucosal contact improving absorption and sustaining local action. Set beside modern pharmaceuticals, *Yoni Pichu* resembles a mucoadhesive sustained-release system — not unlike medicated tampons or bioadhesive vaginal inserts — with the lipid-based vehicle hydrating the mucosa and helping lipophilic herbal constituents diffuse across the epithelium while keeping systemic exposure low. Recent studies showing that lipid-based formulations mucoadhere well and improve vaginal drug retention<sup>21</sup> support this traditional claim, though

standardization, physicochemical characterization, release-kinetics study, sterility testing, and clinical trials remain necessary before it can be called evidence-based.



Fig. 1. Conceptual Mechanism of *Yoni Pichu*

Table-3. Pharmaceutical Interpretation of *Yoni Pichu*

| Ayurvedic Principle      | Modern Pharmaceutical Correlation               |
|--------------------------|-------------------------------------------------|
| <i>Sneha Kalpana</i>     | Lipid-based drug carrier                        |
| Pichu                    | Medicated vaginal tampon                        |
| <i>Snigdha Guna</i>      | Moisturizing and lubricating effect             |
| <i>Sukshma Guna</i>      | Enhanced tissue penetration                     |
| <i>Sthanika Chikitsa</i> | Targeted local drug delivery                    |
| <i>Taila</i>             | Sustained-release vehicle                       |
| <i>Vata Shamana</i>      | Reduction of inflammation and tissue irritation |

*Yoni Varti* :

*Yoni Varti* is the second major local modality the classics describe for *Yonivyapad*.

*Varti* refers to a solid or semisolid cylindrical preparation of finely powdered medicinal drugs bound with honey, ghee, herbal decoctions, or medicated oils; once placed in the vaginal canal, vaginal secretions gradually soften or dissolve it, releasing herbal constituents over time. It is prescribed for excessive discharge, foul odor, itching, infection, unhealthy granulation tissue, and localized inflammatory lesions, with the choice of ingredients — *Krimighna* (antimicrobial), *Kandughna* (anti-pruritic), *Shothahara* (anti-inflammatory), *Vranaropana* (wound-healing), *Rasayana* — depending on the predominant *Dosha* and clinical picture. In design, *Yoni Varti* is remarkably close to modern vaginal suppositories and pessaries,<sup>17,18</sup> both inserted intravaginally and dissolving gradually to maintain adequate drug concentration at the site without frequent re-administration. Its semisolid matrix doubles as a natural drug carrier, keeping medicament in contact with the vaginal mucosa long enough for herbal constituents to penetrate and promote healing — much the same idea behind contemporary controlled-release forms built on biodegradable polymers and mucoadhesive excipients. Viewed this way, *Yoni Varti* is essentially an indigenous controlled-release vaginal dosage form whose potential deserves systematic evaluation before it can find a place in evidence-based women's healthcare.

*Yoni Dhavana* :

*Yoni Dhavana* is the third well-established *Sthanika Chikitsa* procedure — therapeutic irrigation of the vaginal canal using medicated decoctions (*Kwatha*), herbal infusions (*Phanta*), or other suitable liquids. *Dhavana* literally means washing or cleansing, and that is its primary function: removing local

impurities, reducing microbial load, easing inflammation, and restoring the reproductive tract to its normal state. Traditionally it has been used for excessive discharge (*Yoni Srava*), pruritus (*Kandu*), foul odor, inflammation (*Shotha*), and local infections. Decoctions of *Triphala*, *Panchavalkala*, *Nimba* (*Azadirachta indica*), *Lodhra* (*Symplocos racemosa*), and *Daruharidra* (*Berberis aristata*) are common choices, valued for their *Kashaya* (astringent), *Tikta* (bitter), *Krimighna*, *Shothahara*, *Kandughna*, and *Vranaropana* properties.<sup>6</sup> Freshly prepared lukewarm decoctions are used under aseptic conditions to irrigate the vaginal canal, clearing inflammatory exudates and microbial contaminants while letting herbal constituents interact directly with diseased tissue. Pharmaceutically, *Yoni Dhavana* is not far from the vaginal irrigation and medicated lavage still used in contemporary gynecological practice,<sup>13</sup> combining cleansing with delivery of antimicrobial, anti-inflammatory, antioxidant, and wound-healing phytoconstituents that act synergistically. Pharmacological studies have since confirmed significant antimicrobial, antioxidant, and anti-inflammatory activity in *Triphala*, *Lodhra*, *Nimba*, and *Daruharidra*,<sup>28</sup>

lending support to their traditional use, though standardized preparation, optimized concentration and pH, stability data, and robust clinical evidence remain needed to validate it as a formal delivery system.



Fig. 2. Conceptual Mechanism of *Yoni Dhavana*

Table-4. Common Herbs Used in *Yoni Dhavana*

| Herb                 | Ayurvedic Properties                    | Reported Modern Pharmacological Action    |
|----------------------|-----------------------------------------|-------------------------------------------|
| <i>Triphala</i>      | <i>Tridosahara</i> , <i>Vranaropana</i> | Antioxidant, antimicrobial, wound healing |
| <i>Lodhra</i>        | <i>Kashaya</i> , <i>Stambhana</i>       | Anti-inflammatory, antimicrobial          |
| <i>Nimba</i>         | <i>Tikta</i> , <i>Krimighna</i>         | Broad-spectrum antimicrobial              |
| <i>Daruharidra</i>   | <i>Kaphapittahara</i>                   | Antibacterial, anti-inflammatory          |
| <i>Panchavalkala</i> | <i>Kashaya</i> , <i>Ropana</i>          | Tissue healing, antimicrobial             |

*Pharmaceutical Interpretation of Ayurvedic Vaginal Drug Delivery Systems :*

Despite their antiquity, *Yoni Pichu*,

*Yoni Varti*, and *Yoni Dhavana* correspond closely to concepts fundamental to modern pharmaceutical science — targeted administration, prolonged residence time, sustained release,

enhanced local bioavailability, and reduced systemic toxicity.<sup>16</sup> *Yoni Pichu* comes closest to modern mucoadhesive sustained-release formulations, its medicated oil doubling as therapeutic agent and lipid-based carrier while the sterile cotton Pichu acts as a drug reservoir. *Yoni Varti* reads as an indigenous vaginal suppository whose semisolid herbal matrix softens gradually to release active constituents in a controlled way. *Yoni Dhavana* functions as a localized cleansing-and-irrigation system that, beyond mechanically removing secretions and contaminants, also delivers phytoconstituents with antimicrobial, anti-inflammatory, anti-oxidant, and wound-healing properties. *Sneha*

*Kalpana* — the use of medicated oils and ghee as drug carriers — deserves particular mention, since lipid-based formulations interact readily with biological membranes, hydrate tissue, aid diffusion of lipophilic constituents, and extend residence time, much as modern research values lipid-based carriers for mucosal delivery. Conceptual similarity, however, is not scientific validation: wider acceptance will depend on standardized formulations, physicochemical characterization, stability studies, sterility assessment, in-vitro release kinetics, mucoadhesion testing, pharmacokinetic evaluation, and multicentric randomized trials.

Table-5. Comparative Pharmaceutical Interpretation

| Ayurvedic Procedure      | Modern Pharmaceutical Equivalent      | Primary Therapeutic Principle     |
|--------------------------|---------------------------------------|-----------------------------------|
| <i>Yoni Pichu</i>        | Mucoadhesive medicated vaginal tampon | Sustained local drug release      |
| <i>Yoni Varti</i>        | Vaginal suppository/pessary           | Controlled drug release           |
| <i>Yoni Dhavana</i>      | Vaginal irrigation/lavage             | Local cleansing and drug delivery |
| <i>Sneha Kalpana</i>     | Lipid-based drug carrier              | Enhanced mucosal penetration      |
| <i>Sthanika Chikitsa</i> | Targeted local therapy                | Site-specific drug action         |

#### *Comparative Analysis of Ayurvedic and Modern Vaginal Drug Delivery Systems :*

Vaginal drug delivery has evolved around one continuous effort — achieving effective local therapy without paying for it in systemic side effects. Modern pharmaceutical science answers with sophisticated dosage forms — creams, gels, tablets, suppositories, rings, mucoadhesive formulations — but the underlying concept of localized administration is not new; Ayurveda described it long ago through *Sthanika Chikitsa*, and *Yoni Pichu*, *Yoni Varti*, and *Yoni Dhavana* share a remarkable conceptual kinship with today's

systems despite being separated from them by centuries. Both traditions aim at the same target — delivering agents directly to diseased tissue while limiting systemic exposure — but they get there differently: modern systems center on pharmacokinetics, formulation technology, and controlled release, while Ayurvedic therapy weaves together drug properties (*Rasa*, *Guna*, *Virya*, *Vipaka*, *Prabhava*), *Dosha* predominance, tissue status (*Dhatu*), and individual constitution (*Prakriti*) into a more holistic picture. What sets Ayurvedic local therapy apart most is its personalization — the choice of oil, decoction, or formulation follows the patient's own

Doshic imbalance and clinical presentation rather than a fixed protocol, an early version of what modern medicine now calls personalized medicine.

Ayurveda also relies on natural lipid-based carriers — medicated oils (*Taila*) and clarified butter (*Ghrita*) — that act as therapeutic agents in their own right while helping drugs cross biological membranes, a role contemporary research assigns to lipid-based delivery for mucosal penetration, improved bioavailability, and sustained release, suggesting these classical principles have not gone stale. Wider acceptance, however, still runs into real obstacles: inconsistent raw material quality, no standardized preparation methods, limited physicochemical characterization, no uniform quality control, and few high-quality multicentric trials, all of which keep these systems on the margins of mainstream, evidence-based healthcare. Closing these gaps will likely take interdisciplinary collaboration among Ayurvedic clinicians, pharmaceutical scientists, microbiologists, and biomedical researchers — making Ayurveda and modern pharmaceuticals complementary rather than competing approaches to women's reproductive healthcare.

This review makes clear that localized vaginal therapy has been part of Ayurvedic gynecology for centuries, not a recent addition dressed up in old language. Terminology and formulation technology aside, the therapeutic objectives of *Yoni Pichu*, *Yoni Varti*, and *Yoni Dhavana* line up closely with those of contemporary vaginal drug delivery systems: targeted delivery, prolonged retention, sustained action, and minimal systemic side effects — principles that classical Ayurvedic procedure

had already built in. Of the three, *Yoni Pichu* bears the strongest resemblance to modern mucoadhesive sustained-release systems, its cotton reservoir and lipid carrier letting bioactive phytoconstituents diffuse gradually much as controlled-release vaginal inserts and medicated tampons do, with the *Snigdha*, *Sukshma*, and *Vyavayi* properties of *Sneha Kalpana* likely adding deeper tissue penetration and efficacy. *Yoni Varti* shows a similarly striking resemblance to modern vaginal suppositories and pessaries, substituting honey, ghee, and medicated oils for the synthetic polymers and excipients that control release in contemporary formulations. *Yoni Dhavana*, meanwhile, combines cleansing with drug delivery in a way the other two do not, its decoctions of *Triphala*, *Lodhra*, *Nimba*, and *Daruharidra* showing promising pharmacological activity in experimental and clinical work<sup>5,14</sup> that lends scientific weight to a practice relied upon for maintaining vaginal health.

If Ayurvedic vaginal drug delivery has one particular strength, it is this individualized approach: therapy is selected against the patient's *Prakriti*, *Dosha* predominance, disease stage, and clinical presentation rather than a disease indication alone, closer in spirit to the precision medicine pharmaceutical science is only now moving toward, with a possible advantage of better outcomes and less recurrence. These similarities are promising, but most classical formulations still lack standardized manufacturing protocols, physicochemical characterization, validated quality control, sterility assessment, and reproducible release studies, and the clinical literature that exists tends to suffer from small sample sizes, weak randomization, short follow-

up, and inconsistent methodology. Future research needs to concentrate on standardizing and pharmaceutically characterizing these formulations, studying mucoadhesion, testing in-vitro release kinetics and stability, evaluating microbial safety, and running well-designed multicentric randomized controlled trials — work that will take Ayurvedic clinicians, pharmaceutical scientists, microbiologists, and biomedical engineers working together to build herbal vaginal drug delivery systems that keep classical therapeutic principles intact while meeting modern regulatory and scientific standards.

This review has examined *Yoni Pichu*, *Yoni Varti*, and *Yoni Dhavana* against the backdrop of contemporary vaginal drug delivery, and the picture that emerges is one of real conceptual kinship with several modern pharmaceutical approaches to localized vaginal therapy. Direct application of medicament, prolonged contact with vaginal tissue, and localized therapeutic action reflect principles that still guide how modern vaginal dosage forms are developed. The formulation strategies and theoretical frameworks may differ, but the pharmaceutical principles converge — targeted administration, sustained local availability, minimal unnecessary systemic exposure — with *Sneha Kalpana* functioning as a lipid-based carrier, *Yoni Pichu* as a prolonged drug-retention system, *Yoni Varti* as a controlled local dosage form, and *Yoni Dhavana* as a cleansing-and-delivery approach.

None of this means treating these traditional procedures as direct equivalents of contemporary technologies; it means reading them through the lens of modern drug delivery to better understand their rationale and

pharmaceutical significance, inviting real dialogue between Ayurvedic knowledge and current pharmaceutical science without claiming either system's philosophical foundations are interchangeable. Their therapeutic potential is promising, but broader scientific acceptance will require systematic standardization of formulations, quality control, physicochemical characterization, sterility evaluation, stability studies, and well-designed clinical trials — the kind of robust evidence that could translate these classical concepts into evidence-informed clinical practice. Taken as a whole, Ayurvedic vaginal therapies constitute a traditional knowledge system worth taking seriously: conceptually similar, pharmaceutically principled, and readable through the lens of modern drug delivery. What they need now is continued interdisciplinary research — Ayurveda alongside pharmaceutical science, microbiology, and clinical medicine — to strengthen the evidence base and secure their place in improving women's reproductive healthcare.

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