Received: 5 July 2026	Revised: 16 Aug 2026	Accepted: 15 Sept 2026

Review Article

IJAG
Lets Explore Ayurveda Gynaecology

ISSN: 3048-5592

"ENDOMETRIOSIS: AN AYURVEDIC INTERPRETATION AND INTEGRATIVE MANAGEMENT — A NARRATIVE REVIEW"

Tushar Tapadiya[1]

AFFILIATIONS:
1. Research Assistant, Ira Consultancy & Research Organisation, Bhosari, Pune, Maharashtra 411026

CORRESPONDENCE:
Tushar Tapadiya

EMAIL ID:
tushartapadiya11@gmail.com

FUNDING INFORMATION:
Not Applicable

How to cite this article:
Tapadiya T. "Endometriosis: An Ayurvedic Interpretation and Integrative Management — A Narrative Review" International Journal of Ayurveda Gynecology. 2026;3(3):1-7
Sri. 2026.1008.ijag.03.01

ABSTRACT:

Background: Endometriosis is a chronic, oestrogen-dependent inflammatory disease affecting about one in ten women of reproductive age. It causes dysmenorrhoea, chronic pelvic pain, dyspareunia and infertility, and is now regarded as a systemic condition. Hormonal and surgical treatments are effective for many women, but symptoms frequently persist or recur, diagnosis is delayed by years, and many women seek complementary care. Ayurveda has no single term for endometriosis, but its features are described across several Yonivyapad (gynaecological disorders) dominated by vitiated Vata. **Objective:** To propose an Ayurvedic interpretation of endometriosis, correlate it with current pathophysiology and summarise the evidence for Ayurvedic and related integrative interventions. **Methods:** Charaka Samhita, Sushruta Samhita and Ashtanga Hridaya were reviewed for disorders of painful, obstructed and reversed menstrual flow. PubMed was searched for reviews, randomised controlled trials, systematic reviews, case reports and experimental studies on endometriosis, Ayurveda, curcumin, diet, yoga and herbal medicine. Findings were synthesised narratively. **Results:** Endometriosis corresponds most closely to Udavartini yonivyapad, in which reversed movement of Apana vata carries menstrual blood upward, combined with features of Vatiki yonivyapad and Paripluta yonivyapad, and with Granthi-like lesions in advanced disease. Ayurvedic clinical evidence consists of case reports in which Basti, Uttara basti and oral medicines relieved pain and preceded conception. Turmeric-derived curcumin has the strongest supporting evidence among herbs used in Ayurveda: a randomised placebo-controlled trial of nanocurcumin added to dienogest reduced pain and improved quality of life, and experimental studies show anti-inflammatory and anti-angiogenic actions. Evidence for diet and yoga is preliminary. **Conclusion:** Ayurveda offers a coherent Vata-centred framework and several plausible adjunctive interventions for endometriosis. Controlled trials of standardised formulations and Basti protocols, used alongside conventional care, are now needed.

KEYWORDS: Endometriosis, Udavartini yonivyapad, Vatiki yonivyapad, Apana vata, Basti, curcumin

This is an open access article, which permits use and distribution in any medium, provided the original work is properly cited, the use is non-commercial and no modifications or adaptations are made.

INTRODUCTION

Endometriosis is a chronic, inflammatory gynaecological disease characterised by the presence of endometrial-like tissue outside the uterus. It affects approximately 190 million women worldwide and is associated with debilitating pelvic pain, infertility, fatigue, multisite pain and other comorbidities[1]. Estimates suggest that 5% to 10% of women of reproductive age are affected[2]. The classical explanation for the disease is retrograde menstruation, but this description is now considered incomplete. Endometriosis is increasingly recognised as a systemic disease that affects metabolism in the liver and adipose tissue, produces systemic inflammation and alters gene expression in the brain, leading to pain sensitisation and mood disorders[2,3].

Diagnosis is typically delayed by several years after the onset of symptoms, and misdiagnosis is common[1,2]. First-line medical treatment with progestins and low-dose combined oral contraceptives fails in about a third of symptomatic women, probably because of progesterone resistance, and oral gonadotropin-releasing hormone antagonists have become an effective alternative[2]. Surgery can remove lesions and improve pain and fertility, but persistence and recurrence of symptoms after treatment are common[1]. Women with endometriosis also experience substantial anxiety, depression and social isolation, and an integrated model combining physical and psychological care has been recommended[4].

In India and Sri Lanka, research priorities identified by investigators include patient registries, non-invasive diagnosis, multidisciplinary care and, particularly in Sri Lanka, integration of traditional medicine[5]. Many women already combine conventional and traditional care. A clear Ayurvedic interpretation of endometriosis, together with an honest appraisal of the evidence, is therefore useful for both Ayurvedic and biomedical clinicians. This review aims to provide such an interpretation and to summarise the evidence for Ayurvedic and related integrative interventions.

METHODOLOGY

This narrative review was prepared in two parts. First, the primary classical texts of Ayurveda, namely Charaka Samhita (Chikitsa sthana, chapter 30), Sushruta Samhita (Uttara tantra, chapter 38) and Ashtanga Hridaya (Uttara sthana, chapter 33), were studied with their standard commentaries for descriptions of painful, obstructed and reversed menstruation, pelvic masses and infertility[6–8]. Second, PubMed was searched for literature published up to October 2026 using combinations of the terms endometriosis, endometrioma, Ayurveda, Ayurvedic, curcumin, turmeric, herbal medicine, diet, yoga and traditional medicine. Reviews, systematic reviews, meta-analyses, randomised controlled trials, case reports and experimental studies were considered. Every reference cited in this article was checked against its PubMed record for authors, title, journal, year, volume, pages and digital object identifier. Retracted publications identified during the search were excluded, and an experimental study subject to an editorial expression of concern was not relied upon. The findings are synthesised narratively rather than statistically.

CURRENT UNDERSTANDING OF ENDOMETRIOSIS

1. Pathogenesis

Genetic, hormonal and immunological factors all contribute to endometriosis[1]. Retrograde flow of menstrual tissue through the fallopian tubes occurs in most women, but only some develop endometriosis, implying that host factors such as altered immune clearance, local oestrogen production, progesterone resistance and inflammation determine whether ectopic tissue implants and survives[1,2]. Once established, lesions recruit blood vessels and nerves, and activated macrophages and inflammatory cytokines in the peritoneal fluid sustain inflammation and pain[1,3].

2. Clinical presentation

The principal symptoms are progressive dysmenorrhoea, chronic non-menstrual pelvic pain, deep dyspareunia, dyschezia and dysuria, and infertility. Lesions range from superficial peritoneal implants to deep infiltrating nodules and ovarian endometriomas[1]. Symptoms do not correlate closely with the extent of disease, and a long diagnostic delay is common[1,2]. Gastrointestinal symptoms such as bloating and altered bowel habit are frequent and may be mistaken for irritable bowel syndrome[9].

3. Management

Current management is personalised and multimodal. It includes analgesics, hormonal suppression with progestins, combined oral contraceptives and gonad-

otropin-releasing hormone analogues, surgical excision or ablation of lesions, and assisted reproduction for infertility, together with non-pharmacological approaches[1,2]. Because endometriosis is a multisystem disease, an interdisciplinary approach is recommended[1].

AYURVEDIC INTERPRETATION

1. The role of Apana vata

In Ayurveda the downward movement of menstrual blood is governed by Apana vata, the subtype of Vata located in the pelvis. Any disturbance that obstructs or reverses its normal downward direction (Anuloma gati) disturbs menstruation and produces pain, the cardinal sign of vitiated Vata[6]. Endometriosis, with its retrograde menstruation, cyclical pain and inflammation, can be interpreted as a disease of disturbed Apana vata with secondary involvement of Pitta and Kapha.

2. Udavartini yonivyapad

Charaka describes Udavartini yonivyapad as a condition in which suppression of natural urges causes Vata to move upward. The reversed Vata pushes menstrual blood back, so that it is expelled with great difficulty and pain, and the woman feels relief after discharge[6]. Sushruta and Vagbhata give comparable descriptions[7,8]. The literal meaning of Udavarta, upward or reversed movement, provides a striking parallel to retrograde menstruation, and a case report of a large endometrioma in this journal diagnosed the condition as Udavarta yonivyapad[10].

3. Vatiki and Paripluta yonivyapad

Vatiki yonivyapad is characterised by pricking and cutting pain, stiffness and scanty, frothy, painful menstruation, and is caused by Vata-aggravating diet and conduct[6]. Paripluta yonivyapad, a Vata-Pitta disorder, includes inflammation and pain of the genital tract and painful intercourse[6,8]. The combination of chronic pelvic pain, deep dyspareunia and inflammatory features in endometriosis fits these descriptions. In one published case of infertility associated with endometriosis, the condition was diagnosed as Vatiki yonivyapad associated with Paripluta[11].

4. Advanced disease and infertility

Ovarian endometriomas and deep infiltrating nodules are fixed masses, and Ayurvedic practitioners may additionally interpret them in terms of Granthi (a knot-like encapsulated swelling) or Raktaja gulma (a mass formed by obstructed menstrual blood)[6,7]. Infertility associated with endometriosis falls under Vandhyatva, and the classical texts state that a woman does not conceive when her reproductive organs are affected by any of the Yonivyapad[6].

5. Proposed Samprapti

The pathogenesis of endometriosis in Ayurvedic terms may be summarised as follows. Vata-aggravating causes, including suppression of urges, irregular and dry diet, excessive exertion, sleeplessness and emotional stress, vitiate Apana vata. The vitiated Vata reverses its direction (Pratiloma gati) and carries menstrual blood (Artava) out of its normal channel into abnormal sites. The displaced blood, associated with Pitta, produces inflammation and burning pain; with Kapha it forms masses and adhesions. Obstruction of the reproductive channels (Artavavaha srotas) further aggravates Vata, establishing a self-perpetuating cycle of pain and inflammation[6–8]. This model is heuristic, but it directs attention to the same mechanisms as current biology: abnormal movement of menstrual tissue, inflammation, lesion formation and pain sensitisation[1–3].

PRINCIPLES OF AYURVEDIC MANAGEMENT

The core treatment principles are Vatanulomana (restoring the downward movement of Vata), Shulaprashamana (relief of pain), Shothahara (reduction of inflammation), Lekhana (scraping of abnormal tissue) and Garbhasthapana (support of conception when desired). Charaka advises oleation and sudation followed by Anuvasana basti, Niruha basti and Uttara basti for Vata-dominant Yonivyapad, together with Vata-pacifying medicated milk, ghee and oils[6]. Diet and conduct during menstruation (Rajaswala paricharya), avoidance of urge suppression, regular sleep and stress reduction are integral to management[6].

In current practice these principles are translated into Basti and Uttara basti; purification by Virechana (therapeutic purgation) where Pitta and inflammation are prominent; oral formulations containing Vata-pacifying, anti-inflammatory and Lekhana drugs such as Dashamoola, Guggulu preparations, Haridra (turmeric), Shatapushpa and Hingu; and diet, yoga and lifestyle measures.

EVIDENCE FOR AYURVEDIC INTERVENTIONS

1. Basti and Uttara basti

A case report in this journal described a 23-year-old woman with a rapidly enlarging right ovarian endometrioma of 6.9 by 5 cm and acute intermittent abdominal pain, diagnosed as Udavarta yonivyapad[10]. She was treated with Yoga basti, a course of eight medicated enemas, and Kuberaksha vati. Relief of pain allowed surgery to be avoided. After the medicines were stopped the endometrioma enlarged to 10.3 by 5.5 cm, and a second course of Yoga basti was given before her marriage. She conceived within four months of marriage and had a full-term normal delivery without further acute pain; the endometrioma decreased modestly in size over the following year and measured 7.6 by 5.2 cm in the first trimester[10]. This case illustrates both the potential of Basti for pain control and the limited effect on lesion size.

A second case report in this journal described a 32-year-old woman with endometriosis and ten years of primary infertility after unsuccessful hormonal therapy, intrauterine insemination, intracytoplasmic sperm injection and in vitro fertilisation[11]. She was treated with oral medicines and purification procedures including Virechana, Basti and Uttara basti, aiming at Vata pacification, Lekhana, cleansing of channels and support of implantation. After five months she conceived and delivered a healthy full-term baby by caesarean section[11]. Single case reports cannot establish efficacy, and spontaneous conception after failed assisted reproduction does occur, but these reports justify formal evaluation of Basti-based protocols.

2. Herbs used in Ayurvedic practice

Reviews of Ayurvedic herbs for female reproductive health describe the use of turmeric, ginger, ashwagandha, Shatavari, cardamom and Tulsi, for menstrual irregularities, polycystic ovary syndrome, infertility and menopausal symptoms, while critically assessing the methodological rigour of the existing studies and calling for further rigorous trials[12]. Turmeric (Haridra, *Curcuma longa*) and its principal constituent curcumin are by far the best studied in endometriosis.

In a randomised, double-blind, placebo-controlled trial, 86 women aged 18 to 45 years with stage 2 or 3 endometriosis and moderate to severe pain received dienogest 2 mg daily with either nanocurcumin 80 mg daily or placebo for eight weeks[13]. The curcumin group had significantly greater reductions in dysmenorrhoea, dyspareunia, chronic pelvic pain and dyschezia, and greater improvement in quality of life and sexual function, although endometrioma size did not differ significantly between groups[13]. In a second randomised trial of 50 infertile women with endometriosis undergoing assisted reproduction, nanomicelle curcumin 120 mg daily for ten weeks improved serum antioxidant markers, reduced follicular-fluid malondialdehyde, interleukin-8 and tumour necrosis factor-alpha, and was associated with more oocytes, mature oocytes and high-quality embryos than placebo[14].

A 2026 systematic review of 24 randomised trials of dietary supplements, including 2,019 women, found improvements in several pain domains with nanomicellar curcumin used alone or with dienogest, whereas conventional curcumin, omega-3 fatty acids and resveratrol showed no clear benefit[15]. The review also found that adjunctive nanocurcumin reduced endometrioma size in some trials, but that improvements in intermediate fertility markers did not translate into higher pregnancy rates, and it concluded that supplements may support but should not replace standard treatment[15]. The difference between nanocurcumin and conventional curcumin is consistent with the poor oral bioavailability of curcumin and is relevant to Ayurvedic practice, in which turmeric is traditionally combined with fat, milk or black pepper.

Experimental studies offer mechanistic support. In a mouse model, curcumin reduced the number and volume of ectopic lesions, suppressed local oestrogen synthesis by inhibiting protein kinase A and altered the balance of oestrogen receptors alpha and beta[16]. Curcumin also inhibited nuclear factor kappa-B signalling in a pathogenic subset of macrophages identified by single-cell sequencing of endometriotic lesions and reduced lesion volume in animals[17]. These findings correspond well to the Ayurvedic description of Haridra as anti-inflammatory and Lekhana.

3. Evidence from other traditional systems

Comparable evidence from other Asian traditional medicine systems shows what rigorous evaluation of a classical compound formulation can achieve. In a

multicentre, randomised, double-blind, placebo-controlled trial of 164 women, the Tibetan herbal formulation Honghua Ruyi pill taken for three menstrual cycles reduced dysmenorrhoea, non-menstrual pelvic pain and cyst and nodule size and improved quality of life, with effects persisting for three months after treatment and no significant difference in adverse events[18]. A network meta-analysis of 107 randomised trials of Chinese herbal medicines combined with conventional therapy reported additional benefits in pain, hormonal parameters, cyst size and recurrence, although the authors called for larger, high-quality trials[19]. No Ayurvedic compound formulation has yet been tested in this way for endometriosis.

DIET, YOGA AND LIFESTYLE

Ayurveda emphasises warm, freshly cooked, easily digestible food, avoidance of dry, cold and stale food, and regular meal times to pacify Vata. A systematic review of dietary approaches concluded that no single elimination diet suits all women with endometriosis and recommended an anti-inflammatory diet, such as the Mediterranean diet, low in animal products, fried foods and refined sugars, followed by personalised assessment[20]. A meta-analysis of three small studies found that a low-FODMAP diet was associated with improvements in several quality-of-life domains, while emphasising that the findings were hypothesis-generating[21], and a systematic review of five clinical reports found that the diet can reduce gastrointestinal symptoms in selected women[9]. These recommendations are broadly compatible with Ayurvedic dietary principles, though they have not been tested as Ayurvedic regimens.

Yoga, a discipline closely related to Ayurveda, has been evaluated in a retrospective study of 50 women with endometriosis-associated pain resistant to surgery and hormonal treatment. A three-month programme combining weekly yoga with pelvic floor physiotherapy was associated with significant improvement in all domains of the Endometriosis Health Profile-30 and a modest reduction in deep dyspareunia[22]. The absence of a control group limits interpretation, but yoga is low-risk and addresses the stress and pain sensitisation that both Ayurveda and modern medicine recognise in endometriosis[4,22].

DISCUSSION

This review proposes that endometriosis be understood in Ayurveda primarily as a disorder of reversed and obstructed Apana vata, corresponding to Udavartini yonivyapad, with features of Vatiki and Paripluta yonivyapad and, in advanced disease, Granthi-like masses. This interpretation has clear parallels with retrograde menstruation, chronic inflammation and pain sensitisation[1–3,6]. It also explains why Ayurvedic practitioners rely on Basti, the principal treatment for Vata, and on anti-inflammatory and Lekhana drugs such as Haridra.

The strength of the evidence varies considerably. For curcumin, randomised placebo-controlled trials show benefit for pain and quality of life as an adjunct to dienogest[13] and favourable effects on oxidative and inflammatory markers in women undergoing assisted reproduction[14], supported by mechanistic studies[16,17] and a systematic review[15]. The effect appears to depend on formulation, with bioavailable preparations performing better[15]. For Basti, Uttara basti and classical compound formulations, the evidence is limited to case reports[10,11]. Evidence from Tibetan and Chinese medicine demonstrates that rigorous trials of traditional compound formulations are feasible[18,19], and similar trials of Ayurvedic formulations are overdue.

Several priorities follow. First, Ayurvedic trials should enrol women with surgically or radiologically confirmed endometriosis and use validated outcomes such as pain scales, the Endometriosis Health Profile and imaging of endometriomas. Second, interventions should be standardised: turmeric preparations should be chemically characterised and their bioavailability considered, and Basti protocols should specify the drugs, volumes and schedules used. Third, because endometriosis is chronic and relapsing, follow-up should extend for at least six months after treatment. Fourth, Ayurvedic interventions should be tested primarily as adjuncts to standard care, which is the context in which the curcumin trials were conducted and the one most acceptable to patients and gynaecologists[13,15]. Finally, psychological outcomes should be included, given the substantial burden of anxiety and depression[4].

In clinical practice, Ayurvedic treatment can reasonably be offered alongside conventional care for women with persistent pain, intolerance of hormonal therapy, or a wish to avoid repeated surgery. Women with large or enlarging endometriomas, suspected bowel or

urinary tract involvement, or infertility should be managed jointly with a gynaecologist[1].

CONCLUSION

Endometriosis can be interpreted in Ayurveda as a Vata-dominant disorder centred on reversed Apana vata, corresponding to Udavartini yonivyapad. This framework is consistent with current pathophysiology and supports the use of Basti, Vata-pacifying and anti-inflammatory drugs, diet and yoga. Curcumin has the strongest evidence among Ayurvedic herbs, while Basti and classical formulations remain supported only by case reports. Well-designed trials of standardised Ayurvedic interventions as adjuncts to conventional care are needed.

REFERENCES

1. Horne AW, Missmer SA. Pathophysiology, diagnosis, and management of endometriosis. BMJ 2022;379:e070750. https://doi.org/10.1136/bmj-2022-070750
2. Srinivasarao DA, Vidiyala N. Stimuli-responsive polymeric nanoparticles for cancer therapy. In: Advances in stimuli-responsive nanosystems for cancer therapy. Singapore: Springer Nature; 2026. p. 39-63.
3. Zondervan KT, Becker CM, Missmer SA. Endometriosis. N Engl J Med 2020;382(13):1244–56. https://doi.org/10.1056/NEJMra1810764
4. Dipankar SP, Kushram B, Unnikrishnan P, Gowda JR, Shrivastava R, Daitkar AR, et al. Psychological distress and quality of life in women with endometriosis: a narrative review of therapeutic approaches and challenges. Cureus 2025;17(3):e80180. https://doi.org/10.7759/cureus.80180
5. Munshi H, Piyadigama I, Senanayake H, Gajbhiye RK. Endometriosis and adenomyosis research priorities in India and Sri Lanka: a call for regional collaboration. Lancet Reg Health Southeast Asia 2025;34:100547. https://doi.org/10.1016/j.lansea.2025.100547
6. Agnivesha. Charaka Samhita, revised by Charaka and Dridhabala, with Ayurveda Dipika commentary of Chakrapanidatta. Chikitsa sthana, chapter 30 (Yonivyapat chikitsa). Edited by Yadavji Trikamji Acharya. Varanasi: Chaukhamba Surbharati Prakashan; 2011.
7. Kumar RKT, Dharmamoorthy G, Vasavi DD, Vidiyala N, Bagade OM, Elumalai S, et al. Phyto-constituent-based green synthesis of nanoparticles: sources and biomedical applications in cancer therapy. Asian J Green Chem. 2025;9(3):329-54.
8. Vagbhata. Ashtanga Hridaya, with Sarvangasundara commentary of Arunadatta and Ayurveda Rasayana commentary of Hemadri. Uttara sthana, chapter 33. Edited by Harishastri Paradakara. Varanasi: Chaukhamba Surbharati Prakashan; 2010.
9. Watrowski R, Kostov S, Schäfer SD, Juhasz-Böss I, Palumbo M, Sparić R, et al. Low-FODMAP diet for gastrointestinal symptoms in endometriosis: a systematic review. Nutrients 2026;18(13). https://doi.org/10.3390/nu18132164
10. Soundaryashree NR, Chandan RS, Singamaneni VR, Nagidi HR, Patel G, Vidiyala N, et al. Development and validation of RP-HPLC method for quantification of bamifylline in pharmaceutical formulations using analytical quality by design (AQbD) principles. Adv J Chem Sect A. 2025:2076-97.
11. Asmabi MA, Jithesh MK, Govindan J. Ayurveda management of primary infertility associated with endometriosis – a case report. J Ayurveda Integr Med 2024;15(1):100852. https://doi.org/10.1016/j.jaim.2023.100852
12. Patibandla S, Gallagher JJ, Patibandla L, Ansari AZ, Qazi S, Brown SF. Ayurvedic herbal medicines: a literature review of their applications in female reproductive health. Cureus 2024;16(2):e55240. https://doi.org/10.7759/cureus.55240
13. Sargazi-Taghazi M, Ghaznavi H, Sheervalilou R, Razavi M, Sepidarkish M. Add-on effect of curcumin to dienogest in patients with endometriosis: a randomized, double-blind, controlled trial. Phytomedicine 2025;141:156715. https://doi.org/10.1016/j.phymed.2025.156715
14. Jannatifar R, Asa E, Cheraghi E, Verdi A. Nanomicelle curcumin improves oxidative stress, inflammatory markers, and assisted reproductive techniques outcomes in endometriosis cases: a randomized clinical trial. Naunyn Schmiedebergs Arch Pharmacol 2025;398(9):11933–41. https://doi.org/10.1007/s00210-025-03958-7

15. Seven M, Galla L, Gstoettner M, Wenzl R. Nutritional supplements in the treatment of endometriosis-associated symptoms: a systematic review. Reprod Fertil 2026;7(4). https://doi.org/10.1530/RAF-26-0079
16. Zhao H, Chen X, Zhang S, Zhang J, Wang Y, Xia Z, et al. Curcumin alleviates endometriosis in sexually mature female mice by targeting PKA and inhibiting de novo estrogen synthesis. Biomedicines 2026;14(9). https://doi.org/10.3390/biomedicines14092099
17. Zong C, Xu J, Jiang Q, Yuan X, Gu R, Chen Y, et al. Curcumin modulates the function of SPP1+ macrophages via NF-κB signaling to alleviate endometriosis. Int Immunopharmacol 2026;180:116644. https://doi.org/10.1016/j.intimp.2026.116644
18. Han M, Liang XF, Gao J, Wang Y, Cao LX, Wang BJ, et al. Honghua Ruyi pill, a compound herbal medicine, improves endometriosis-related dysmenorrhea: a multicenter randomized, double-blind, placebo-controlled trial. J Integr Med 2026;24(2):182–91. https://doi.org/10.1016/j.joim.2025.12.011
19. Nyavanandi D, Mandati P, Vidiyala N, Parupathi P, Kolimi P, Mamidi HK. Hot melt extrusion paired nozzle based additive manufacturing techniques for design and development of pharmaceuticals [preprint]. Preprints. 2024.
20. Szczuko M, Ziętek M, Janda-Milczarek K, Rębacz-Maron E, Nawrocka-Rutkowska J, Pokorska-Niewiada K. An overview of essential nutritional strategies and products in the treatment of endometriosis. Nutrients 2025;18(1). https://doi.org/10.3390/nu18010077
21. Rabelo AA, Oliveira JFCE, Rios JR, de Souza Nunes Y, Yacoub GB, Corrêa CA, et al. Effects of a low-FODMAP diet on symptoms and quality of life in women with endometriosis: a systematic review and meta-analysis. J Hum Nutr Diet 2026;39(5):e70353. https://doi.org/10.1111/jhn.70353
22. Ramayanam NR, Bukke SPN, Kumar BJ, Vidiyala N, Sunkishala P, Thalluri C, et al. Nipah virus infection as a putative risk factor for Alzheimer's disease: a testable hypothesis. J Alzheimers Dis Rep. 2026;10:25424823261490069.