Research Article

Staged Ayurvedic management (Shamana and Shodhana) followed by a term live birth in a woman with two early pregnancy losses and scanty menstruation: a case report

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Abstract

Background Recurrent early pregnancy loss accompanied by scanty menstruation is a difficult clinical problem, and in many couples no cause is identified. We report a woman with two consecutive losses at 9 and 10 weeks who conceived during a staged Ayurvedic treatment programme, without further documented ovulation induction, and carried the pregnancy to term. Case presentation A 28-year-old Indian woman with two previous pregnancies and no live birth attended on 27 May 2025 wishing to conceive. Both pregnancies, conceived in February and October 2024, had ended in spontaneous abortion, at 9 and 10 weeks. Menstrual bleeding lasted 1–2 days, required 1–2 pads daily, and was brownish with clots throughout. Tiredness, dyspareunia and a reported 6 kg weight gain had followed about six months of ovulation induction. Serum total testosterone was 62.9 ng/dL (laboratory reference interval 8.4–48.1 ng/dL). The Ayurvedic working diagnosis was Artavakshaya associated with Garbhasrava. Three months of Shamana (palliative) treatment comprised Chandraprabha vati, a Gokshura–Patha–Indrayava–Trikatu combination and Sariva–Manjishtha phanta. Snehapana, Virechana and Yoga basti were given in September 2025, followed by Laghumalini vasant, Phala ghrita and the herbal combination. Menstrual bleeding lengthened to 3–4 days and became reddish, with clots limited to day 1. Repeat total testosterone on 23 June 2025 was 0.15 ng/mL (15 ng/dL), within the reference interval of the second laboratory, which used a different method. Follicular monitoring in October and November 2025 documented rupture of right ovarian follicles of 19 mm and 20 mm. A urine pregnancy test was positive on 17 December 2025. Ultrasonography showed a live intrauterine pregnancy at 7 weeks 3 days (fetal heart rate 158 beats/min) and, at 36 weeks 5 days, an estimated fetal weight of 2788 g. A male infant weighing 3.0 kg was delivered by elective caesarean section on 12 August 2026. Conclusions Improved menstrual characteristics, a testosterone concentration within the reference interval, documented ovulation and a term live birth followed the staged Ayurvedic programme. These observations do not establish a causal treatment effect. Controlled studies that include a full evaluation for recurrent pregnancy loss are needed.

Keywords: Ayurveda, Garbhasrava, Artavakshaya, Recurrent pregnancy loss, Secondary infertility, Case report.

1. Introduction

Recurrent pregnancy loss (RPL), now commonly defined as the loss of two or more pregnancies [1, 2], affects about 2% of women [3]. Genetic, anatomical, endocrine, immunological and thrombophilic factors have all been associated with it (Fig. 1), yet in roughly half of couples no cause is found [4, 5]. Guidelines therefore recommend a structured evaluation [1, 2, 5]. Repeated losses, investigations and fertility treatment carry a physical and psychological burden [3]; in the present case ovulation induction was accompanied by reported weight gain, after which the patient sought Ayurvedic care.

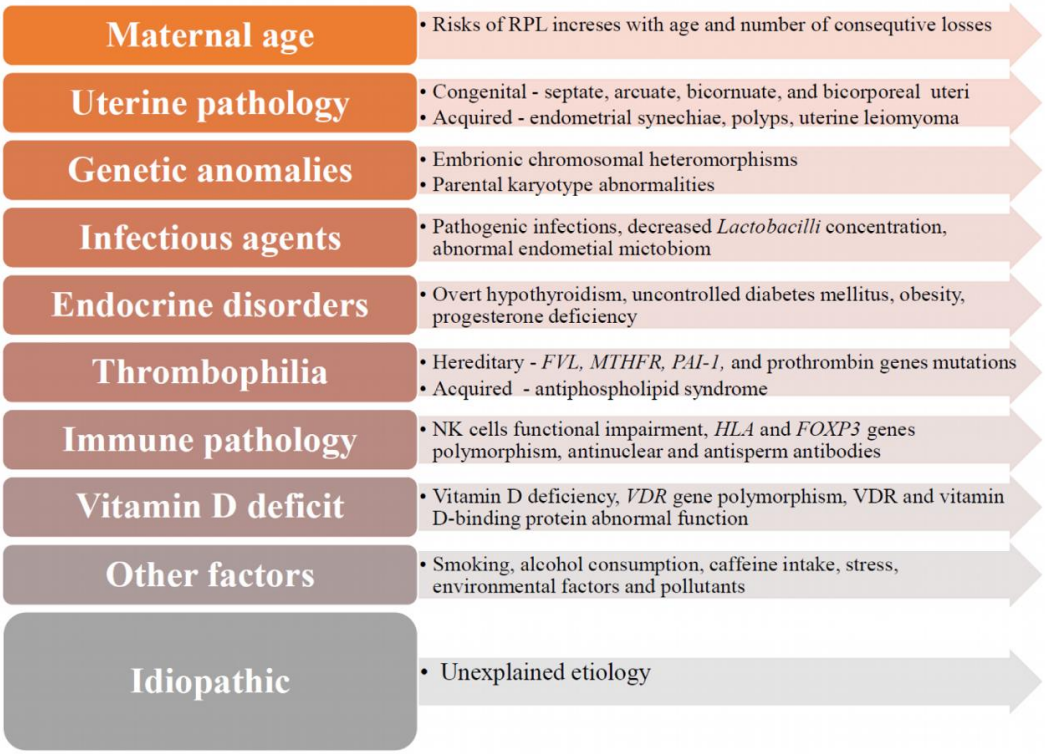

Fig. 1 Etiology and risk factors of recurrent pregnancy loss.

Androgen excess is relevant to both menstrual disturbance and fertility. Hyperandrogenism, ovulatory dysfunction and polycystic ovarian morphology are the defining features of polycystic ovary syndrome (PCOS; Fig. 2) [6, 7], and a raised free androgen index has been associated with a higher rate of subsequent miscarriage in women with recurrent miscarriage [8].

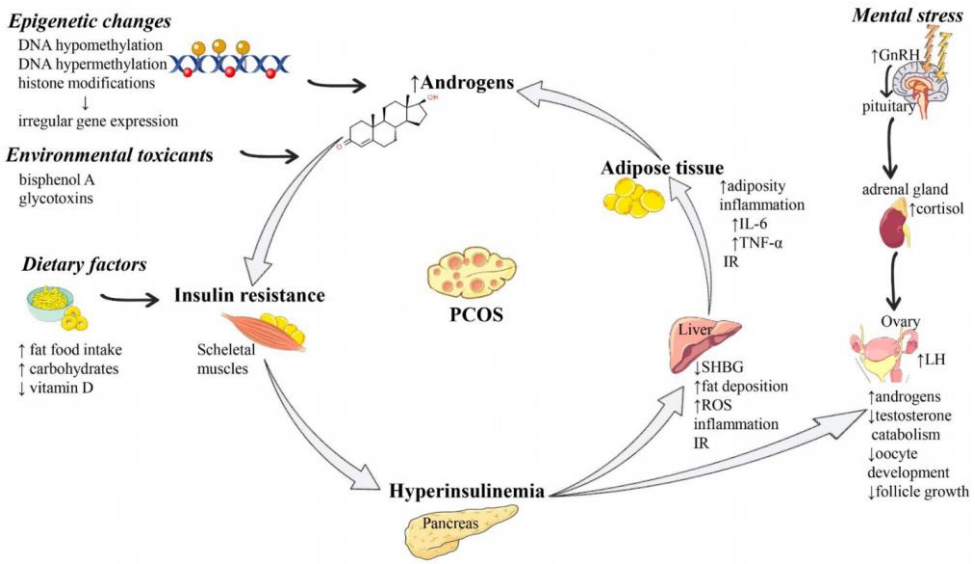

Fig. 2 Pathophysiology of polycystic ovary syndrome (PCOS). Upward and downward arrows beside a term indicate an increase and a decrease. DNA deoxyribonucleic acid, GnRH gonadotropin-releasing hormone, IL-6 interleukin-6, IR insulin resistance, LH luteinizing hormone, ROS reactive oxygen species, SHBG sex hormone-binding globulin, TNF-α tumor necrosis factor-α.

In Ayurvedic terminology, early pregnancy loss is described as *Garbhasrava*, and reduced menstrual bleeding is

considered under *Artavakshaya*. Four factors are traditionally held to be necessary for conception: *Ritu* (the fertile period), *Kshetra* (the reproductive tract), *Ambu* (nourishment) and *Beeja* (the gametes). They provide the conceptual basis for interventions directed at menstrual characteristics and the reproductive milieu. These concepts describe the clinical rationale; they are not evidence of a specific physiological mechanism. Published reports of Ayurvedic management of RPL are few and uncontrolled [10, 11].

The features of interest in this case are two losses at 9 and 10 weeks, scanty clotted menses of short duration with an elevated initial testosterone result, discontinuation of an ovulation-induction programme after weight gain, and monthly documentation of the menstrual pattern together with follicular and obstetric ultrasound findings. The report follows the CARE guidelines [12, 13].

Case presentation

Patient information

The patient was a 28-year-old married Indian woman employed in information technology. She had been married for about three years and reported infertility for one and a half years. Her principal concerns were the wish to conceive, scanty menstruation, tiredness, dyspareunia and a reported gain of 6 kg during previous fertility treatment. Her history is summarized in Table 1.

Table 1 Patient history

History	Details
Menstrual	Menarche at 15 years; cycle 30–35 days; bleeding for 1–2 days; 1–2 pads/day; brownish; clots throughout
Obstetric	G2P0L0A2D0. First pregnancy: conceived February 2024, spontaneous abortion at 9 weeks. Second pregnancy: conceived October 2024, spontaneous abortion at 10 weeks. Both were managed medically, without surgical evacuation
Family	No history of major illness
Personal	No addictions; mixed diet; sleep disturbed by work; exercise twice a week; work-related stress; bowel and bladder habits normal
Medical and surgical	None
Partner	Semen analysis within normal limits

Over about six months before presentation she had undergone serial follicular monitoring and ovulation induction with letrozole 5 mg once daily for the first five days of menstruation and human chorionic gonadotropin 5000 IU by injection to trigger ovulation. She did not conceive during this period and reported gaining 6 kg before choosing Ayurvedic treatment.

Clinical findings

At presentation the menstrual pattern was as described in Table 1, with tiredness and dyspareunia. Hirsutism and minimal facial acne were noted. General, systemic and pelvic examination was otherwise unremarkable (Table 2). The Ayurvedic examination is given in Table 3.

Table 2 Clinical examination at presentation (27 May 2025)

Parameter	Finding
Height, weight	152 cm, 58 kg (6 kg gain reported during previous treatment)
Body mass index	25.1 kg/m²[a]
Pulse	78/min
Blood pressure	125/79 mmHg
Respiratory rate	21/min
Temperature	Afebrile
General examination	Hirsutism and minimal acne on the face. No pallor, edema, icterus, cyanosis, clubbing or lymphadenopathy
Respiratory, cardiovascular and central nervous systems	Normal
Abdomen	Soft, non-tender
Vaginal examination	Uterus anteverted, anteflexed and of normal size; fornices free; no tenderness; nulliparous os

[a] Calculated from the recorded height and weight

Table 3 Ayurvedic examination and assessment

Parameter	Finding
Ashtavidha pariksha	
Nadi (pulse)	*Vata-kaphaja*
Jihva (tongue)	*Ishat sama* (slightly coated)
Mala (stool)	Once a day
Mutra (urine)	6–7 times a day, once at night
Shabda, *Drik*	*Avishesha* (unremarkable)
Sparsha (touch)	*Anushna-sheeta*
Akriti (build)	*Madhyama*
Dashavidha pariksha	
Prakriti	*Vata-kaphaja*
Satmya	*Vyamishra*
Sara, *Vikriti*, *Bala*, *Samhanana*, *Satva*, *Pramana*, *Ahara shakti*, *Jarana shakti*, *Vyayama shakti*, *Vaya*	*Madhyama* (each)
Assessment	
Hetu (*Nidana*)	*Vata*- and *Kapha*-aggravating factors, lack of exercise, stress, improper diet, inadequate nutrition and possible depletion of *Rasa dhatu*; *Garbhashaya daurbalya* attributed to improper *Ritucharya*
Dosha	*Vata* (*Apana vata*) and *Kapha*; *Pitta vikriti*
Dushya	*Rasa dhatu*, *Rakta dhatu*, *Artava*; *Garbhashaya daurbalya*
Srotas	*Rasavaha*, *Raktavaha* and *Artavavaha srotas*
Agni, *Koshtha*	*Mandagni*; *Madhyama koshtha*
Sama or *Nirama*	*Nirama avastha*

Timeline

The course of the case is set out in Table 4, and the sequence of treatment phases is shown in Fig. 3.

Table 4 Timeline of the case

Date	Event
February 2024	First conception; spontaneous abortion at 9 weeks
October 2024	Second conception; spontaneous abortion at 10 weeks
About 6 months before 27 May 2025	Follicular monitoring and ovulation induction; 6 kg weight gain reported
26 May 2025	Serum total testosterone 62.9 ng/dL (Laboratory A)
27 May 2025	First Ayurvedic outpatient visit; *Shamana* started
23 June 2025	Serum total testosterone 0.15 ng/mL (15 ng/dL; Laboratory B); LMP 23 June 2025
27 June and 27 July 2025	Menses improved in duration, flow and colour; tiredness and dyspareunia resolved by 27 July 2025
27 August 2025	Third follow-up; decision for *Shodhana*
Early September 2025	*Snehapana* for 5 days
11 September 2025	*Virechana* with *Trivrit avaleha*
14–20 September 2025	*Yoga basti* for 7 days
27 September 2025	Menstrual flow improved; *Laghumalini vasant* and *Phala ghrita* started
27 October 2025	LMP 5 October 2025; right ovarian follicle 19 mm, ruptured on day 16
27 November 2025	LMP 10 November 2025; right ovarian follicle 20 mm, ruptured on day 17
17 December 2025	Urine pregnancy test positive
28 December 2025	Pregnancy support started alongside antenatal care
1 January 2026	Ultrasound: single live intrauterine gestation, 7 weeks 3 days, fetal heart rate 158 beats/min
25 July 2026	Ultrasound: 36 weeks 5 days, cephalic presentation, estimated fetal weight 2788 g
12 August 2026	Elective caesarean section at 39 weeks 2 days by LMP; male infant, 3.0 kg

LMP last menstrual period

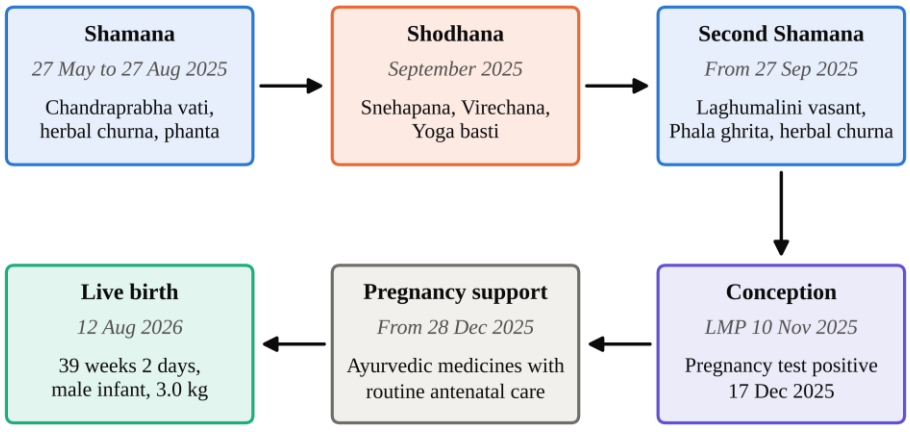

Fig. 3 Sequence of treatment phases and outcome. LMP last menstrual period.

Diagnostic assessment

Investigations

Serum total testosterone was measured twice, in two laboratories (Table 5, Fig. 4). Although the laboratories and

methods differed, each result can be read against the reference interval of the laboratory that produced it: the first, the day before treatment began, was above the interval, and the second, 27 days after treatment began, was within it. Because the assays, units and reference intervals were not the same, the two values show a change in classification from above range to within range and cannot be subtracted to give the size of the change. The cycle day of the first sample was not recorded; the second was drawn on the date recorded as the first day of menstruation. Follicular ultrasonography was used to assess ovulation, and a urine pregnancy test and obstetric ultrasonography confirmed and monitored the pregnancy (see Follow-up and outcomes). The original laboratory and ultrasound reports are held by the authors.

Table 5 Serum total testosterone

Date	Result	Laboratory reference interval	Method, laboratory
26 May 2025	62.9 ng/dL	8.4–48.1 ng/dL (above the interval)	ECLIA, Laboratory A
23 June 2025	0.15 ng/mL (15 ng/dL)	Female < 1.0 ng/mL (within the interval)	CLIA, Laboratory B

CLIA chemiluminescence immunoassay, ECLIA electrochemiluminescence immunoassay

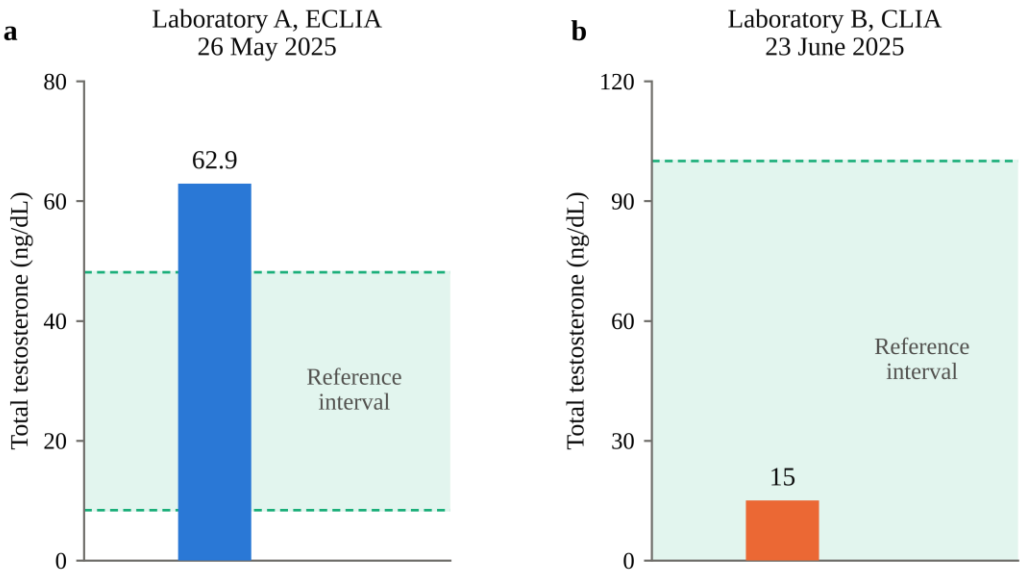

Fig. 4 Serum total testosterone against each laboratory's own reference interval (shaded). **a** Laboratory A, electrochemiluminescence immunoassay (ECLIA), 26 May 2025. **b** Laboratory B, chemiluminescence immunoassay (CLIA), 23 June 2025; the result of 0.15 ng/mL is shown as 15 ng/dL. The panels have separate axes because the assays differ.

Diagnostic reasoning

From the conventional standpoint, two consecutive early miscarriages had occurred against a background of scanty menstruation and an elevated testosterone concentration. On the basis of the hirsutism, acne, raised testosterone and the findings of the earlier ovulation studies, the treating team's clinical impression was of a PCOS-like endocrine disturbance. The record contains no thyroid, prolactin, gonadotropin, anti-Müllerian hormone or dehydroepiandrosterone sulfate results and no assessment of ovarian morphology, so PCOS can be neither confirmed nor excluded by current criteria [6]. Nor does it document the evaluation recommended after recurrent loss, including assessment of the uterine cavity, antiphospholipid antibody testing and thyroid function [1, 2].

From the Ayurvedic standpoint, the short, scanty, brownish and clotted bleeding was interpreted as *Artavakshaya*, and the two early losses as *Garbhasrava*. The documented assessment of *Hetu*, *Dosha*, *Dushya* and *Srotas* is given in Table

3.

Prognosis

The patient was younger than 35 years and had had two losses. A live birth is the most likely outcome of the next pregnancy in such women whether or not treatment is given [14, 15], and no individual prognosis can be drawn from a single case.

Therapeutic intervention

Treatment was given in four phases (Table 6, Fig. 3).

Table 6 Therapeutic intervention

Phase and dates	Intervention	Dose and duration
1. *Shamana*, 27 May to 27 August 2025 (3 months)	*Chandraprabha vati*	250 mg twice daily
	Gokshura, *Patha*, *Indrayava* and *Trikatu* churna[a]	250 mg twice daily, taken with warm water
	Sariva–Manjishtha phanta[a,b]	10 mL morning and evening
2. *Shodhana*, September 2025	*Snehapana*	5 days, with *Phala ghrita*; 25 mL at the start, rising to a peak dose of 200 mL
	Virechana (11 September 2025)	*Trivrit avaleha*[a] 30 g with 50 mL of milk; 11 *vega*; *Madhyama shuddhi*
	Yoga basti (14–20 September 2025)	7 days; *Anuvasana basti* with *Sahacharadi taila*, *Niruha basti* with *Dashamula–Erandadi*
3. *Shamana* after *Shodhana*, 27 September 2025 until conception	*Laghumalini vasant*	125 mg twice daily
	Phala ghrita	10 mL twice daily
	Gokshura, *Patha*, *Indrayava* and *Trikatu* churna	250 mg twice daily, taken with warm water
4. Pregnancy support, from 28 December 2025	*Swarna malini vasant*	125 mg once daily
	Garbhapala rasa	125 mg twice daily
	Masanumasika tablet[c]	One tablet twice daily, month by month, for 8 months
	Antenatal care by the gynecologist	Folic acid and vitamin supplements, as required

[a] *Gokshura Tribulus terrestris* L.; *Patha Cissampelos pareira* L.; *Indrayava* seeds of *Holarrhena pubescens* Wall. ex G.Don; *Trikatu* equal parts of *Zingiber officinale* Roscoe, *Piper nigrum* L. and *Piper longum* L.; *Sariva Hemidesmus indicus* (L.) R.Br.; *Manjishtha Rubia cordifolia* L.; *Trivrit Operculina turpethum* (L.) Silva Manso

[b] Hot infusion: the powder was added to boiling water in the prescribed proportion, left to stand for at least 10 hours and filtered when cool

[c] Month-specific formulations described in the classical texts for each month of pregnancy, compounded as tablets

Rationale and changes in treatment

The initial *Shamana* programme addressed the menstrual presentation and the Ayurvedic assessment of *Artavavaha srotas*, and the outpatient notes record its continuation at the June and July visits. After the bleeding characteristics had improved, *Shodhana* (purificatory therapy) was given in September as preparatory treatment before further attempts at conception. The subsequent regimen comprised medicines traditionally used in reproductive care, and support after conception was given alongside routine obstetric care. No further ovulation induction was documented.

Diet, lifestyle and counselling

Pathya (advised): *Tila* (sesame), *Kulattha* (horse gram), *Masha* (black gram), jowar *bhakri*, *Amalaki*, *Draksha* (grapes), *Dadima* (pomegranate), guava, and seasonal fruits and vegetables; freshly prepared, hygienic food; regular, timely and balanced meals in a quantity matched to hunger; sound sleep; a 45-minute walk; and observance of *Dinacharya*, *Ritucharya* and *Rajaswalacharya* (daily, seasonal and menstrual regimens).

Apathya (to be avoided): overeating, and eating before the previous meal is digested; fried, stale, fermented, refined and processed foods, including bakery items, paneer, pizza, noodles and *panipuri*; refrigerated water, ice cream, cold and carbonated drinks; alcohol, smoking and excessive coffee; excessively spicy and sour foods and pickles; irregular sleep, including late nights, late rising, missed sleep and daytime sleep; a sedentary lifestyle; mental stress, worry and anxiety; and suppression of natural urges, particularly of bowel movement, micturition and flatus.

Follow-up and outcomes

Menstrual pattern and symptoms

Follow-up was approximately monthly, usually on the 27th day of the month. Bleeding lengthened from 1–2 days at baseline to 3–4 days by the July visit, pad use rose from 1–2 to 2–3 per day, the colour changed from brownish to reddish, and clots, at first present throughout, were confined to day 1 and were then no longer noted (Table 7, Fig. 5). The patient reported that tiredness and dyspareunia had resolved by 27 July 2025. At the August visit menstruation had not occurred and a urine pregnancy test was negative; the next period began on 1 September 2025, a delay of 5 days that was usual for this patient.

Table 7 Menstrual pattern and findings at each visit

Visit	Bleeding (days)	Pads/day	Clots	Colour	Other findings
27 May 2025 (baseline)	1–2	1–2	Throughout	Brownish	Tiredness, dyspareunia
27 June 2025	2–3	2–3	Day 1 only	Light brownish	Tiredness and dyspareunia slightly less; LMP 23 June 2025
27 July 2025	3–4	2–3	Day 1 only	Reddish brown	No tiredness or dyspareunia; LMP 25 July 2025
27 August 2025	–	–	–	–	Period absent; urine pregnancy test negative
27 September 2025	3–4	2–3	Slight, day 1	Reddish	No fresh complaint; LMP 1 September 2025, delayed by 5 days
27 October 2025	Flow improved	2–3	None noted	Reddish	LMP 5 October 2025; right ovarian follicle 19 mm, ruptured on day 16
27 November 2025	Normal flow	2–3	None noted	Reddish	LMP 10 November 2025; right ovarian follicle 20 mm, ruptured on day 17
28 December 2025	–	–	–	–	Urine pregnancy test positive on 17 December 2025

LMP last menstrual period

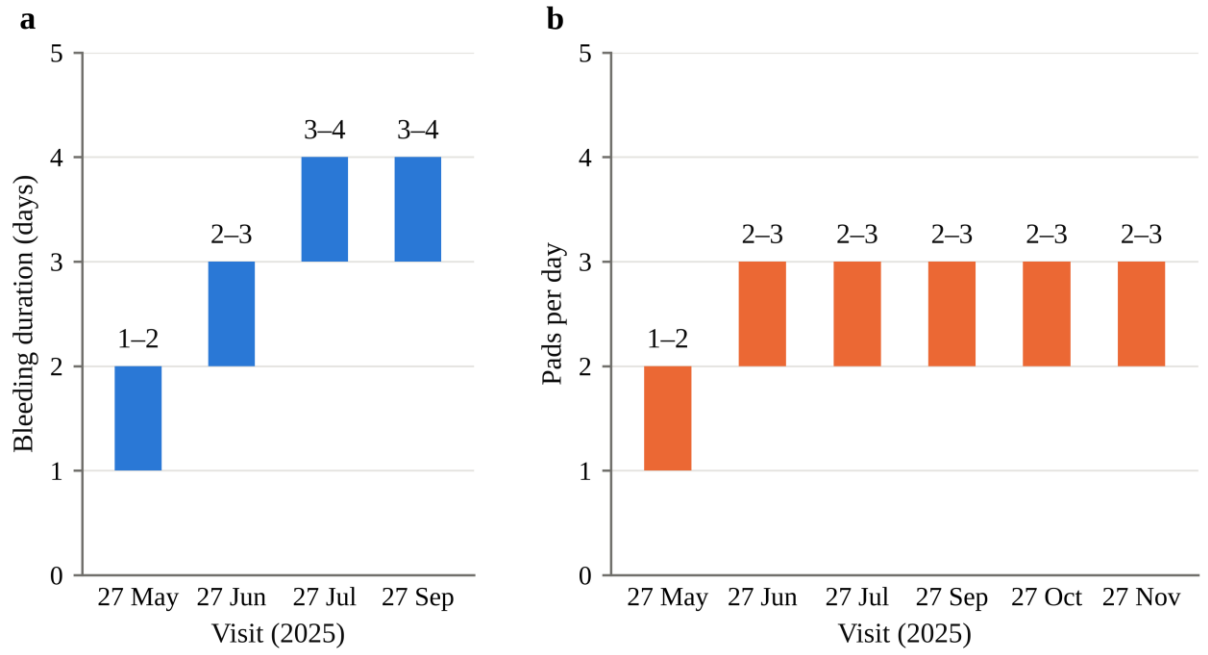

Fig. 5 Menstrual pattern at follow-up visits in 2025, shown as the recorded ranges. **a** Bleeding duration; in October and November it was recorded descriptively (Table 7). **b** Pads used per day. No period occurred before the August visit.

Ovulation and conception

Follicular ultrasonography documented ovulation in two successive cycles after *Shodhana*: a 19 mm right ovarian follicle ruptured on day 16 of the October cycle, and a 20 mm right ovarian follicle ruptured on day 17 of the November cycle. Conception occurred in the November cycle (LMP 10 November 2025), and the urine pregnancy test was positive on 17 December 2025.

Pregnancy and delivery

Obstetric ultrasonography showed a single live intrauterine gestation at 7 weeks 3 days and a normally grown fetus in cephalic presentation at 36 weeks 5 days (Table 8). The pregnancy thus continued well beyond the gestational ages of the two earlier losses (Fig. 6). An elective caesarean section was performed on 12 August 2026 at 39 weeks 2 days by LMP (estimated date of delivery 17 August 2026), with the birth of a male infant weighing 3.0 kg. The condition of mother and infant after delivery was recorded as within normal limits; the indication for elective caesarean section and the Apgar scores were not specified in the record.

Table 8 Obstetric ultrasound findings

Date	Gestation	Findings
1 January 2026	7 weeks 3 days by LMP; CRL 11.4 mm, corresponding to 7 weeks 2 days	Single live intrauterine gestation; FHR 158 beats/min; yolk sac normal; no perigestational hematoma; both ovaries normal; no adnexal mass
25 July 2026	36 weeks 5 days by LMP	Cephalic presentation; FHR 137 beats/min; placenta posterior, upper segment, grade 2; no placenta previa or hematoma; AFI 15 cm; cervical length 3.7 cm; BPD 88 mm; AC 320 mm; FL 68 mm; estimated fetal weight 2788 g; no detectable anomaly

AC abdominal circumference, AFI amniotic fluid index, BPD biparietal diameter, CRL crown–rump length, FHR fetal heart rate, FL femur length, LMP last menstrual period

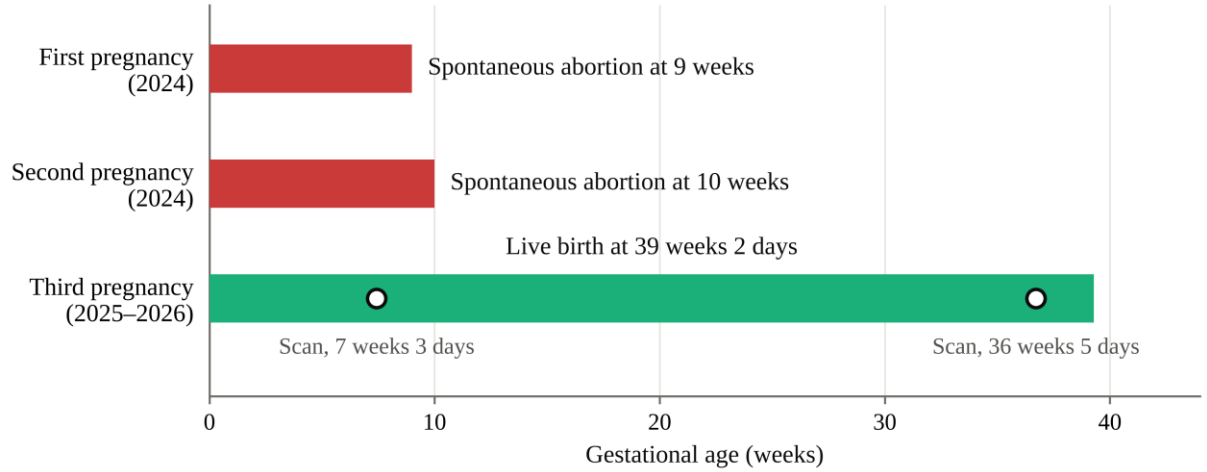

Fig. 6 Gestational age reached in each of the patient's three pregnancies. Circles mark the two ultrasound examinations in the third pregnancy.

Adherence, tolerability and adverse events

Adherence was not formally assessed, and tolerability of *Virechana* and *Basti* was not specifically recorded. A systematic assessment of adverse events was not documented, so their absence cannot be confirmed.

Discussion and conclusions

In this woman with two early pregnancy losses, scanty clotted menses and an initially elevated testosterone concentration, a staged *Shamana–Shodhana* programme was followed by a longer and redder menstrual flow, a testosterone result within the reference interval, ultrasonographically documented ovulation in two consecutive cycles, conception without further ovulation induction and a live birth at term.

Interpretation of the clinical course

Menstrual bleeding improved during the first *Shamana* phase, *Shodhana* followed in September, and follicular ultrasonography then documented ovulation in October and November, with conception in the November cycle (Fig. 3). This sequence is consistent with the traditional reasoning recorded in the case notes, but a temporal association cannot demonstrate efficacy. Most women with two previous losses go on to a live birth with supportive care alone, and the patient's age placed her in the group with the lowest risk of miscarriage [14, 15]. She had conceived spontaneously twice in 2024, so the capacity to conceive was not in question; the outcome of interest is the continuation of the pregnancy, and for that the natural course remains a plausible explanation.

The testosterone results deserve the same caution. The first exceeded its laboratory's reference interval and the second lay within the interval of another laboratory, which is a clinically acceptable finding. Direct immunoassays for testosterone are, however, imprecise at the concentrations found in women and are poorly standardized between methods [16], and the second sample was taken only 27 days after treatment began. The change in classification is therefore noted, without an estimate of the size of any treatment effect. Current guidance does not recommend routine androgen testing in the evaluation of RPL [1], although an association between a raised free androgen index and later miscarriage has been reported [8]. Hirsutism, acne and the raised testosterone are compatible with the hyperandrogenic component of PCOS (Fig. 2), but a cycle length of 30–35 days lies within the range regarded as regular, and ovarian morphology and anti-Müllerian hormone were not documented [6].

Ayurvedic rationale for the interventions

The following account gives the traditional reasoning for each element of treatment as understood by the treating physicians. It explains why the medicines were chosen and is not offered as evidence that they act in the manner described.

Shodhana is regarded in Ayurveda as an important part of preconception care: it is held to eliminate vitiated *Dosha*, correct *Agnimandya* (impaired digestion and metabolism) and clear the *Srotas* (channels), so restoring *Dosha*

equilibrium and preparing the body for conception. *Virechana* is used for *Dosha nirharana* and *Srotovishuddhi*, and *Basti*, particularly *Niruha basti*, to regulate *Vata* through *Vatanulomana* and *Srotoshodhana*. Because *Vata* is considered to govern the formation of *Artava*, ovulation and the functions of the *Garbhashaya* (uterus), its normalization is thought essential to reproductive health. *Shodhana* thus serves as a preparatory measure in the preconception management of *Vandhyatva* (infertility) and is followed by *Shamana* to support conception.

Chandraprabha vati is described as *Tridoshaghna*, *Mutrala*, *Shothahara* and *Srotoshodhaka*; it was chosen to correct the *Kapha–Vata* imbalance, reduce *Srotorodha* (obstruction of the channels) and, through its *Deepana–Pachana* action, support *Agni*. The combination of *Gokshura*, *Patha*, *Indrayava* and *Trikatu* is described by Vagbhata (*Ashtanga Hridaya*, *Sharirasthana* 1/16) in the treatment of *Granthibhuta artava dushti* (clotted menstrual flow) and is credited with *Deepana*, *Pachana*, *Lekhana* and *Srotoshodhaka* properties: *Gokshura* is held to balance *Vata* and *Pitta*, *Patha* and *Indrayava* to pacify the *Dosha* and aid digestion, and *Trikatu* to kindle *Agni* and reduce *Kapha*-related obstruction. *Sariva* and *Manjishtha* are regarded as *Rakta prasadana*, *Pitta shamaka* and *Raktashodhaka*, and the *phanta* was given to maintain the quality of *Rakta dhatu*; the treating physicians also considered it supportive of endocrine balance, for which there is no clinical evidence.

Laghumalini vasant is traditionally described as a *Rasayana* with *Balya* and *Brimhana* properties, intended to support metabolism, *Dhatu poshana* (tissue nourishment) and general strength. *Phala ghrita* is a classical *ghrita* formulation indicated in *Vandhyatva* and other reproductive disorders, credited with *Garbhasthapaka*, *Rasayana* and *Brimhana* properties and intended to favour conception and the maintenance of pregnancy. *Swarna malini vasant* is a herbo-mineral formulation used for its *Rasayana*, *Balya* and *Ojovardhaka* properties to improve vitality and tissue nourishment.

Relation to the literature

Published support for Ayurvedic management of RPL consists of isolated case reports and one small pilot study [10, 11]. An Ayurvedic regimen has been reported to improve subfertility associated with PCOS in an uncontrolled clinical study [17], and *Phala ghrita*, given by a different route, has been studied in female infertility with follicular monitoring [18]. None of these studies had a control group. The present report adds a case with dated menstrual records, ultrasonographic confirmation of ovulation and obstetric follow-up to term, but it shares the limitations of that literature.

Safety considerations

Three of the medicines used (*Laghumalini vasant*, *Swarna malini vasant* and *Garbhapala rasa*) are herbo-mineral preparations, and two were taken during pregnancy. Lead, mercury or arsenic has been detected in about one-fifth of Ayurvedic medicines purchased over the Internet, more often in preparations made with processed metals and minerals [19]. Manufacturer, batch and heavy-metal test data for the products used here were not recorded, and no maternal laboratory monitoring was documented. Together with the absence of a systematic adverse-event record, this means that the safety of the regimen in pregnancy cannot be judged from this case. Future reports should give the source and quality certification of each product and should record adverse events prospectively.

Strengths and limitations

The strengths of the report are its sequential monthly follow-up, objective follicular ultrasound findings, two biochemical measurements and obstetric ultrasound extending to 36 weeks 5 days, well beyond the gestational ages of the earlier losses, which together give a detailed chronology. Its limitations are as follows:

- It is a single uncontrolled case; a live birth is possible after two early miscarriages without the intervention, and the natural course remains a plausible explanation
- After conception, Ayurvedic preparations were used alongside contemporary antenatal care, so the obstetric outcome cannot be attributed to one system of treatment
- Testosterone was measured by different assays in different laboratories, with different units and reference intervals, and the cycle day of the first sample is unknown
- A comprehensive conventional evaluation for RPL was not documented, so causes other than androgen excess are insufficiently characterized
- Most outcomes are descriptive; validated menstrual, symptom or Ayurvedic assessment scales were not used

- Adherence, tolerability, adverse events and product quality were not systematically recorded

Conclusions

In this patient with two early pregnancy losses, scanty clotted menses and an initially elevated testosterone concentration, a staged *Shamana–Shodhana* approach was followed by improved menstrual characteristics, ultrasonographically documented ovulation and a term live birth. The observations are compatible with a benefit of treatment but do not establish one. Prospective studies using a standardized evaluation for recurrent pregnancy loss, validated outcome measures and systematic safety recording are warranted.

Patient's perspective

A written statement from the patient was not available. At follow-up she reported less tiredness and dyspareunia at the June 2025 visit and neither symptom at the July visit, and she described her menstrual flow as improved from September 2025 onwards.

List of abbreviations

CARE: CAse REport guidelines; CLIA: chemiluminescence immunoassay; ECLIA: electrochemiluminescence immunoassay; LMP: last menstrual period; PCOS: polycystic ovary syndrome; RPL: recurrent pregnancy loss

Declarations

Ethics approval and consent to participate

Under the policy of the authors' institution, ethics committee approval is not required for a report of a single case. Written informed consent was obtained from the patient.

Consent for publication

Written informed consent was obtained from the patient for publication of this case report and any accompanying images. A copy of the written consent is available for review by the Editor-in-Chief of this journal.

Availability of data and materials

The de-identified data supporting this report are contained in the article. The original laboratory and ultrasound reports are held by the authors.

Competing interests

The authors declare that they have no competing interests.

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Authors' contributions

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