

## SUCCESSFUL AYURVEDIC TREATMENT OF SECONDARY INFERTILITY DUE TO LOW AMH AND UTERINE FIBROID: A CASE REPORT

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### ABSTRACT

Low Anti-Müllerian Hormone (AMH) levels—typically below 1 ng/mL—indicate a severely diminished ovarian reserve and are considered a strong predictor of poor response to conventional fertility treatments. In such cases, the likelihood of natural conception is often deemed negligible, and donor egg IVF is commonly advised. This case study presents the Ayurvedic management of a 39-year-old woman with a critically low AMH level of 0.06 ng/mL, a five-year history of secondary infertility, and an intramural uterine fibroid. The patient was treated with a personalized Ayurvedic regimen comprising of the proprietary medicines- *Poshini*, *Bhedini*, *Vardhani*, and *Upaja*—formulations aimed at improving egg quality, enhancing follicular response and ovulation, clearing *srotorodha* (channel obstruction), and restoring hormonal and uterine balance. By the third month, ovulation was documented despite negligible AMH, and spontaneous conception occurred in the sixth month. This case highlights the potential of individualized Ayurvedic treatment in modulating the internal environment to optimize ovarian function and support conception, even in cases of profoundly low AMH. These findings call for further mechanistic studies and larger clinical evaluations to explore the role of Ayurveda as a complementary strategy in fertility care.

**KEYWORDS:** *Low AMH, Egg Quality, Ovarian Function, Ayurvedic Fertility Management, Secondary Infertility, Uterine Fibroid, Artava Dhatu, Poshini, vardhani, Spontaneous Conception.*

### INTRODUCTION

In females, Anti-Müllerian Hormone (AMH) is secreted by the granulosa cells of early-stage ovarian follicles (primary and small antral follicles) and serves as a well-established marker of ovarian reserve.<sup>[1]</sup> AMH levels naturally decline with age and are nearly undetectable after menopause.<sup>[2]</sup> Clinically, levels below 1 ng/mL are associated with reduced fertility potential, while values under 0.1 ng/mL—such as the 0.06 ng/mL observed in this case—indicate a critically diminished follicular pool.<sup>[3,4]</sup> Women with very low AMH, particularly those over 35, are often advised to pursue assisted reproductive technologies (ART) using donor oocytes—a path that involves significant emotional, financial, and physiological costs.<sup>[5]</sup> However, low AMH does not entirely preclude the possibility of natural conception. Emerging perspectives recognize that diminished AMH may also stem from modifiable factors such as chronic stress, metabolic or immune dysfunction, lifestyle imbalances, or uterine conditions like fibroids. Thus,

AMH should be interpreted within a broader clinical and systemic context, rather than as an absolute predictor of infertility.<sup>[6]</sup>

In this case, the patient also presented with a small intramural uterine fibroid measuring 22mm × 14mm × 12mm. Chronic anovulatory cycles and sustained estrogen hypersecretion are key underlying factors in the pathogenesis of such fibroids, as they promote unopposed estrogenic stimulation of the uterine tissue, leading to fibroid growth.<sup>[7]</sup> While fibroids may contribute to infertility in certain contexts, the primary goal in this case was not fibroid removal but to treat the root cause of its development— which is to enhance ovulation and reproductive potential, with the ultimate objective being natural conception.<sup>[8]</sup>

Ayurveda approaches infertility (*Vandhyatva*) through a holistic framework that emphasizes the improvement of egg quality, so that even if AMH (ovarian reserve) is

low, they can conceive. In this case, we report the successful spontaneous conception of a 39-year-old woman with a critically low AMH level and a known uterine fibroid, following six months of a structured Ayurvedic intervention. The treatment plan was specifically aimed at improving follicular response and egg quality through the administration of proprietary medicines *Poshini*, *Bhedini*, *Vardhani*, and *Upaja*—each selected based on their documented actions in enhancing reproductive vitality and hormonal balance. This case contributes to the emerging discourse around Ayurvedic treatment which may offer a valuable adjunct or alternative to ART in patients with low AMH.

## CASE REPORT

### Patient Information

A 39-year-old female presented to our Ayurvedic clinic in February 2024 with a history of secondary infertility. She was accompanied by her 43-year-old husband. The couple had been trying to conceive naturally without success for two years. The patient was a working professional, generally healthy, but emotionally distressed due to repeated failed attempts to conceive. Her menstrual cycles were regular but lighter than usual.

### Personal History

**Table 3: Personal History of Patient.**

<b>Alcohol Consumption</b>	No
<b>Smoking</b>	No
<b>Junk Food</b>	Occasional intake (once a week)
<b>Non-veg</b>	Occasional Intake
<b>Stress</b>	Primarily related to fertility concerns

### Menstrual History

**Table 4: Menstrual History of Patient.**

<b>Cycle Duration</b>	28-30 days, regular cycles
<b>Menstrual Flow</b>	2-5 days, scanty
<b>Pain</b>	Body pain
<b>Clots</b>	No clots

**Obstetric History-** G1 P1 L1 A0 D0 1

### Sexual History

**Table 5: Sexual History of Patient.**

Vaginal Dryness	No
Dyspareunia	No
Libido	Low

### Past Medical History and Diagnostic Investigations

**-HSG Report:** Normal

**-Follicular Study:** Shows response to medication with injection of HCG (10000 IU) for egg growth and rupture.

**-Hormonal Tests:** AMH level of 0.06 ng/ml, normal TSH, FSH and prolactin levels.

She was also diagnosed with an intramural uterine fibroid, and recent hormonal investigations had revealed an AMH level of 0.06 ng/mL, indicating severe diminished ovarian reserve (DOR). The male partner reported no significant medical issues, and his semen analysis was within normal limits.

### Female Patient's General Health

#### Vitals

**Table 1: Patient Vital Signs.**

Vitals	Values
<b>Pulse</b>	75/min
<b>BP (Blood Pressure)</b>	124/82
<b>RR (Respiratory Rate)</b>	18/min
<b>SPO2 (Oxygen Saturation)</b>	98%

**Table 2: Other Examinations.**

Parameter	Observation
<b>Naadi Pariksha</b>	Pitta-Vata
<b>Appetite</b>	Normal
<b>Bowel</b>	Normal
<b>Sleep</b>	Normal
<b>Energy Levels</b>	Normal

**-Ultrasound:** Free fluid not seen in POD, both ovaries were normal, normal uterine size, with one intramural fibroid, normal endometrial thickness.

**Diagnosis:** Secondary Infertility, Low AMH with Intramural Fibroid.

### Fertility Treatment History

IVF was suggested as the next step due to the low ovarian reserve. The patient was also advised to continue regular cycles of hormone injections (Inj. HCG) for egg rupture.

**Surgical History:** LSCS done 5 yrs ago

**Male Partner's General Health:** The male partner, aged 43, with no significant medical history. A semen analysis was performed, which showed normal sperm count, motility, and morphology. No treatment history for male infertility was reported.

**Family History:** No relevant findings.

**Past Medical History and Treatment:** No significant findings

**Surgical History:** None reported.

### Treatment and Management

**Table 7: Ayurvedic Proprietary Medicines, Ingredients, and Dosage for Treatment.**

Medicine given	Ingredients/Contents	Dosage
<b>1. Tablet Vardhani (600 mg)</b>	Shuddha Hingul, Haritaki, Amalaki, Bibhitak, Shatawari, Shatapushpa, Bala	2 pills after breakfast and 2 pills after dinner

2. <b>Tablet Bhedini (500 mg)</b>	Sariva, Patol, Shuddha Hingul, Lauha, Bhasma, Anantmool, Guggulu, Nimba, Kutaja,	2 pills after breakfast and 2 pills after dinner
3. <b>Tab. Upaja (500 mg)</b>	Kumari, Shuddha Kasis, Gulkand, Sunthi, Dalchini, Elaichi,	2 pills after breakfast and 2 pills after dinner
4. <b>Tablet Poshini (600 mg)</b>	Shuddha Hingul, Bang Bhasma, Shivlingi, Shatavari, Ashwagandha, Jivanti, Putranjivak	2 pills after breakfast and 2 pills after dinner

### Advice

The patient was advised to follow a balanced diet and adopt a healthy lifestyle to support overall well-being and enhance fertility. Key recommendations included maintaining a regular sleep routine, avoiding late nights, and engaging in daily physical activity for at least 30 minutes to support both physical and mental health. Emphasis was placed on effective stress management techniques and minimizing the intake of processed and junk foods.

Additionally, the patient was guided to practice ovulation tracking to better understand her fertile window and optimize the chances of conception. The patient adhered consistently to the treatment protocol, including dietary and lifestyle modifications, stress management, daily exercise, and ovulation monitoring. After three months of holistic treatment, the patient and her partner successfully conceived, demonstrating the effectiveness of the integrative approach in restoring fertility.

### DISCUSSION

Low Anti-Müllerian Hormone (AMH) is widely accepted as a reliable biomarker of ovarian reserve, with levels below 0.5 ng/mL indicating a severely diminished follicular pool.<sup>[1][2][3]</sup> An AMH level of 0.06 ng/mL, as seen in this case, is considered critically low and typically associated with minimal chances of spontaneous conception. In conventional reproductive medicine, such patients are generally advised to undergo assisted reproductive technologies (ART), particularly donor oocyte in vitro fertilization (IVF), due to the poor prognosis with their own oocytes.<sup>[4][5]</sup>

However, this case challenges that clinical prognosis and illustrates that AMH, while important, may not be the sole determinant of fertility potential—especially when the case is viewed through the broader, systemic lens of Ayurveda.

While AMH reflects follicular quantity, it does not assess quality, which is increasingly recognized as essential for conception and sustaining a healthy pregnancy.<sup>[8]</sup> Moreover, current biomedical interventions offer limited strategies for improving oocyte quality.<sup>[9]</sup> Ayurveda fills this therapeutic gap by emphasizing nourishment of reproductive tissues (*Artava Dhatu Poshana*), hormonal rhythm regulation, systemic detoxification (*Srotoshodhana*), and mind-body integration, which collectively create a conducive internal environment for ovulation and implantation.

In addition to low AMH, the patient also presented with a small intramural uterine fibroid measuring 22mm × 14mm × 12mm. From both modern and Ayurvedic perspectives, the presence of fibroids—particularly when intramural—can contribute to subfertility depending on their size, location, and impact on the endometrial cavity. Importantly, fibroid development is often rooted in chronic anovulatory cycles and persistent estrogen dominance or hypersecretion, which create a hormonal milieu conducive to abnormal proliferation. In this case, however, the fibroid did not significantly distort the uterine cavity or mechanically interfere with implantation.<sup>[7],[8]</sup> Therefore, the primary therapeutic goal was not fibroid removal, but rather restoring ovulatory cycles and hormonal equilibrium, with the ultimate aim being natural conception. This aligns with Ayurvedic principles, which prioritize correction of root causes—such as Apana Vata dysfunction and Rasadhatu-agni imbalance—over symptomatic removal, unless absolutely indicated.

The Ayurvedic protocol was thus designed not as a general fertility-enhancing regimen, but as a focused intervention tailored to the unique challenges posed by critically low AMH and concurrent hormonal imbalance.

**Tablet Vardhani** combines *Shuddha Hingul*, *Triphala* (*Haritaki*, *Amalaki*, *Bibhitaka*), *Shatavari*, *Shatapushpa*, and *Bala* to enhance egg quality and regulate hormonal function. **Tablet Upaja**, formulated with *Kumari* (*Aloe vera*), *Shuddha Kasis*, *Gulkand*, *Sunthi*, *Dalchini*, and *Elaichi*, promotes healthy follicular growth and timely ovulation, while helping to balance estrogen levels and control fibroid progression. **Tablet Bhedini** contains *Sariva*, *Patol*, *Shuddha Hingul*, *Lauha Bhasma*, *Anantmool*, *Guggulu*, *Nimba*, and *Kutaja*—herbs known for their detoxifying and anti-inflammatory properties that help cleanse the uterus, reduce inflammation, and arrest fibroid growth. Notably, *Guggulu* plays a central role in shrinking fibroid masses and restoring uterine health. **Tablet Poshini**, a comprehensive fertility-support formulation, includes *Shuddha Hingul*, *Bang Bhasma*, *Shivlingi*, *Shatavari*, *Ashwagandha*, *Jivanti*, and *Putranjivak*. This blend supports ovarian rejuvenation, strengthens reproductive tissues, balances hormones, and improves uterine receptivity—collectively enhancing natural fertility potential.<sup>[10][11]</sup>

By the third month of treatment, follicular activity was noted, and spontaneous conception occurred in the sixth month. This outcome demonstrates that ovarian function can be stimulated, even in cases of critically low AMH,

when the egg quality and internal environment is optimized.

**Chronological Clinical Response to Ayurvedic Management**  
**Table 6: Monthly Improvements Observed in the Patient.**

Month	Key Observation	Clinical Significance
1	Improved digestion; reduced bloating	Enhanced metabolism; reduced GI discomfort
2	Improved menstrual flow	Better hormonal balance
3	Follicular development; timely ovulation (Test results positive in ovulation detection kit)	Improved ovarian response
4	Increased libido, energy, emotional well-being; reduced stress	Hormonal balance; improved psychosexual health
5	Fibroid growth halted	Hormonal regulation; reduced estrogen dominance
6	UPT and Beta- HCG- Positive	Conception achieved

More broadly, this case underscores the need to reframe fertility care from an AMH-centric model to a more dynamic, integrative perspective. While AMH is a useful diagnostic tool, it does not account for modifiable internal factors such as tissue nourishment, hormonal coordination, immune function, metabolic health, or emotional resilience—all of which are comprehensively addressed in Ayurveda.

The patient's lifestyle practices were also aligned with Ayurvedic principles (*Ahara-Vihara*), including regulated sleep, appropriate physical activity, dietary adjustments, and mental wellness routines. Emotional health, often a neglected aspect in fertility care, is emphasized in Ayurveda as a major determinant of *Vandhyatva* (infertility), and addressing it played a pivotal role in the patient's therapeutic response.

## CONCLUSION

This case highlights the significant potential of a targeted Ayurvedic protocol—*Poshini*, *Bhedini*, *Vardhani*, and *Upaja*—in managing infertility in a woman with critically low AMH (diminished ovarian reserve) and intramural fibroid pathology.

While fibroids are conventionally managed through surgical interventions like myomectomy, our approach redefines treatment by focusing on underlying functional imbalances rather than structural correction. In this case, conception was achieved not by targeting the fibroid, but by addressing the root causes: long-standing anovulation and estrogen excess.

The Ayurvedic intervention successfully restored ovulation, improved egg quality, and enhanced hormonal balance and uterine receptivity, leading to spontaneous natural conception. Importantly, the fibroid did not impair implantation, reinforcing that surgery is not always necessary for conception in similar cases.

Beyond fertility outcomes, the patient also experienced improved menstrual regularity and a reduction in estrogen dominance, reflecting deeper systemic balance. The treatment was well-tolerated, with no adverse effects, and demonstrated high compliance, making it a

safe, cost-effective, and non-invasive alternative to ART in selected cases.

This case underscores a paradigm shift in managing fibroid-associated infertility—moving from structural intervention to functional restoration through Ayurveda.

## CONFLICT OF INTEREST

The authors declare no conflicts of interest relevant to this article.

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