

**EFFICACY OF A TOPICAL UNANI FORMULATION, ZIMAD IRSA AND KHARBAQ
SAFED IN BASOORE LABANIYA (ACNE VULGARIS) – A CASE STUDY****Benish Bashir^{*1}, M. A. Quamri², Umer Hamid Wani³ and Mehwish Ayoub⁴**¹PG Scholar, Department of Amraz-e-Jild wa Tazeeniyat, National Institute of Unani Medicine, Kottigepalya, Magadi Main Road, Bengaluru, 560091, Karnataka.²HOD, Department of Amraz-e-Jild Wa Tazeeniyat, National Institute of Unani Medicine, Kottigepalya, Magadi Main Road, Bengaluru, 560091, Karnataka.³PG Scholar, Department of Jarahat, National Institute of Unani Medicine, Kottigepalya, Magadi Main Road, Bengaluru, 560091, Karnataka.⁴PG Scholar, Department of Moalajat, Regional Research Institute of Unani Medicine, Habbak, Srinagar, 190006, Jammu and Kashmir.***Corresponding Author: Benish Bashir**

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ABSTRACT

Acne vulgaris is one of the most common skin diseases in the world which affects all races and ethnicities. The highest incidence of acne exists in adolescence where 80% of all teenagers can be diagnosed with it. Occurrence is very common, affecting approximately 85% of young people. Usually its onset occurs during puberty or may appear around 25 years or older. Severity is more in males than females, lower incidence in Asians and Africans. In Unani classical literature, it is mentioned as *Basoore labaniya*. The present case study was planned to envisage the use of a topical Unani formulation, *Zimad Irsa & Kharbaq safed* in the treatment of Acne vulgaris (*Basoore Labaniya*). We reported a 25-year old female diagnosed with acne vulgaris. She was treated with the said intervention. Patient was evaluated before and after treatment using IGA and CADI scores. Significant improvement was seen in the patient after treatment. No adverse effects were observed during the treatment. This case study was done to highlight the efficacy of Unani drugs so as to initiate a step to develop potential herbal-origin drugs for the treatment of Acne vulgaris.

KEYWORDS: Acne vulgaris; *Basoore labaniya*; *Irsa*; *Kharbaq safed*; IGA; CADI.**INTRODUCTION**

Acne vulgaris literally meaning common acne, is a chronic inflammatory disease of the pilosebaceous unit, it is characterized by seborrhoea, the formation of open and closed comedones, erythematous papules and pustules and in more severe cases nodules, deep pustules and pseudocysts.^[1] Acne is a disease of the pilosebaceous unit which usually presents on areas of the body with the highest density of these units such as the face, neck, upper chest, shoulders and back. It first appears at puberty, at which time there is a sudden increase in the level of circulating androgens.^[2] For the development of acne, besides seborrhoea, hyperkeratosis of the pilosebaceous ostia is an important pathogenic factor. It begins early in females, but is more severe in males and usually persists until early 20's, although in a few patients, it may even continue into fifth decade.^[3] Acne is a polymorphic disease, which occurs predominantly on the face (99%), to a lesser extent on the back (60%) and chest (15%). Although it is usually a condition of adolescence, acne affects 8% of 25-34 years old and 3%

of 30-44 year old age group. Lesions frequently appear in a mid-facial distribution.^[1,4] Post-inflammatory macules, pigment changes and scarring commonly occur. Follicular plugging (comedones) prevent drainage of sebum, androgen stimulates sebaceous glands to produce more sebum. Bacterial lipase converts lipids to fatty acids and produces proinflammatory mediators which lead to an inflammatory response. Distended follicle walls break, sebum, lipids, fatty acids, keratin and bacteria enter the dermis, provoking an inflammatory and foreign-body response. Intense inflammation leads to scars.^[5]

In Unani system of medicine, Acne vulgaris is termed as *Basoore labaniya*, *Mohasa* or *Keel*. In his book, Canon of Medicine, the renowned Unani physician, Ibn Sina says that *Mohasa* are tiny white eruptions on the nose and cheeks that mimic condensed milk drops. The etiology is considered *Madda Sadeediya* (suppurative material) which comes to the skin surface due to the

body's *bukharat* (vapours) and is not resolved in the skin because of its viscosity.^[6] The other factors are indigestion, constipation, irregularities of menstruation and use of hot and spicy diet.^[7] *Basoore Labaniya* is characterized by small, white eruptions that are akin to milk droplets or frozen ghee (*Roghan zard*).^[8,9,10,11] When these lesions are opened a solid, yellow colour substance comes out which resembles the solidified ghee and the face looks inflamed.^[12]

In Unani system of medicine, numerous drugs are used for the treatment of Acne vulgaris and myriad formulations have been tested on Acne vulgaris so far. In this case study, the patient was treated with a topical unani formulation of *Zimad Irsa & Kharbaq safed*, which are suggested in classical unani literature for the treatment of *Basoore labaniya* (Acne vulgaris). The paste of Unani formulation (*Irsa & Kharbaq Safed*)^[6,10,13] has specific action in Acne vulgaris, as *Irsa*^[14,15] is *Jali* (detergent), *Mujaffif* (desiccant), *Muhallil* (resolvent), *Mukhrij balgham* (expectorant), *Mufatteh sudad* (Deobstruent), whereas *Kharbaq safed*^[14,16,17] possesses *Jali* (detergent), *Mujaffif* (desiccant), *Muhallil* (resolvent), *Mukhrij balgham* (expectorant), *Gussal* (lavage), *Dafa-Taffun* (antiseptic) and *Dafa-Tashhanuj* (anticonvulsant) properties.

CASE REPORT

A 25 year old female presented to the OPD-4 of National Institute of Unani Medicine & Hospital, Bengaluru with chief complaint of painful eruptions on her face, affecting mainly cheeks since 3 years. She had regular monthly cycles with normal flow with negative family history for acne vulgaris. There was no history of any other comorbidities like HTN, T2DM, PCOS etc. She had been using fairness cosmetics for a long time. There was a positive drug history of self-medicated OTC anti-

acne ointments. Dermatological examination showed multiple papulo-pustular lesions over her face mainly cheeks. Under magnifying glass there were multiple black heads and white heads seen. The patient was followed up weekly and photographs were taken before and after treatment. As a result of the treatment at the end of 28 days, improvement was observed. The eruptions on the face were diminished in number and inflammation was also regressed. No adverse effects were reported during the treatment.

Diagnostic Assessment: The IGA^[18] score was used to evaluate the severity of lesions and CADI questionnaire^[19] was used to assess the patient's quality of life.

Therapeutic intervention: The patient was instructed to make a paste of *Zimad Irsa & Kharbaq safed* (1:2) in water, then apply topically on the facial acne lesions once daily for 30 minutes and rinse off with lukewarm water, for four weeks. She was advised to avoid contact of intervention with eyes. Pre and post treatment photographs of the lesions were obtained at baseline and 28th day respectively.

Informed consent: A written informed consent was obtained prior to the intervention.

Outcome & Follow-up: The typical features of lesions were observed throughout the treatment period and there was a considerable improvement in the flare-ups. Furthermore, the IGA and CADI scores were assessed on 0th, 14th, 21st & 28th day of follow-ups. IGA and CADI scores reduced dramatically from 3.00 and 5.15 at baseline to 1.93 and 3.07 at last follow up respectively with $p < 0.001$ which is statistically significant.



Pre- treatment

Post treatment

DISCUSSION

The anti-acne activity of *Irsa* and *Kharbaq safed* is probably due to *Jali* (detergent), *Mujaffif* (desiccative), *Muhallil* (resolvent), *Qabiz* (astringent), *Mukhrij balgham* (expectorant), *Gussal* (lavage), *Dafae' Taffun*

(antiseptic), *Musakkin* (analgesics) and *Mubarriid* (refrigent) properties. Due to these properties, it removes *madda* from deep parts of the skin, provides *Jila*, reduces inflammatory lesions and prevents further flare up of acne. A clinical trial is underway with the same

intervention in acne patients to find its efficacy on large scale.

CONCLUSION

Based on the outcome of the single case observation it can be concluded that Unani drugs have a great potential in treating diseases. In the conventional system of medicine, although there are a variety of treatment modalities but due to the side effects and relapses, non-compliance becomes imperative. In addition, the treatment is usually exorbitant. In the light of fore-going crisis, unani medicines are least toxic, frugal and efficacious; thus, they can be used to treat acne-like disorders. There is an increasing demand for natural-origin medicines in the modern era, therefore a strong desire to perform large scale randomised clinical studies to assess the efficacy and safety of unani drugs is inevitable.

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