Evidence based case report on 19 years female suffering from acne vulgaris

Dr. Vaishali Singh, Dr. Ravindra Singh, Dr. Anil Aggarwal and Dr. Pranab Kumar Chakraborty

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Abstract
Nodulocystic acne is a severe form of acne that significantly damages the underlying layer of skin and impact the person’s mental health and quality of life. Although there are lots of topical ointments for such cases but it often fails. In this particular case, a 19-year-old female patient received individualized homoeopathic treatment using Phosphorus to heal her pustular and nodulocystic eruptions on her face. With no recurrence, the symptoms progressively got better. Systematic case taking was carried out utilizing RADAR software, and the Synthesis repertory was used to repertoires the entirety of the symptoms. At the start, middle, and end of the treatment, photos were taken to record the progress of the case. Not only had the patient's presenting issue significantly improved, but so had their quality of life. This instance was special since homoeopathy was used to treat severe acne on the face that was not improving with traditional therapy.

Keywords: Inflammatory disease, acne vulgaris, acne, phosphorus, pimple, homeopathy

Introduction
Chronic acne vulgaris (AV) is a common skin illness that mostly affects the face but can also affect the upper arms, torso, and back. It is characterized by inflammatory nodules, pustules, or non-inflammatory comedones. This provocative non-inflammatory acne does not leave scars, severe acne vulgaris frequently leaves behind scars of varying degrees. This condition affects the pilo-sebaceous unit and has a complex aetiology. Nodulocystic acne and other severe forms of Acne Vulgaris have a significant psychological impact on the person life [1, 6].

With an estimated range of 35% to over 90%, AV is most frequently noticed during puberty, however it is not limited to this age range and can affect people of all ages. Males are more likely than females to experience teenage acne. Compared to rural populations, urban inhabitants are typically more impacted by AV [3]. Certain racial and ethnic groups, such as Asians and Africans, are predisposed to having AV. People with darker skin tones typically experience hyper pigmentation as well. The contributory factors includes exposure to excess sunlight, use of medications like steroids, oil-based cosmetics and facial massage, endocrine disorders like polycystic ovarian disorder(PCOD), excessive scrubbing of the face with soaps and detergents, and psychological stress etc. [2].

The combination of multiple host variables, such as cellular immunological response by inducing the release of pro-inflammatory cascade specifically TH17 cells, interleukin-17, interferon-gamma which causes inflammation, thus helps in colonizing the specific strains of C.acnes which contributes in prevalence and severity of acne, and androgen release via stimulation of the sebaceous glands, is involved in the pathogenesis of AV. Genetics and nutrition are two more variables that could affect how the illness starts and progresses. Individuals with the 1st degree family members affected with acne have 3 times greater of developing acne as compared to individuals without a family history [4]. Inflammation, germs, sebum buildup, and follicular hyperkeratosis are all present. There isn't much of a difference in the sebum production of acne sufferers and those without the condition. The comedone is a tiny, hyperkeratotic plug that changes and grows into pustules, nodules, inflammatory papules, and acne lesions. Androgenic activation and insulin resistance aid in this process. One particular bacterium, Propionibacterium acnes, is prevalent in a large proportion of patients [3]. The kind and severity of acne lesions determine how acne vulgaris should be managed.
Topical and systemic antibiotics are used in the conventional treatment of acne, and if the patient has PCOD or the body has an excess of androgens, hormonal therapy is next. Despite its severity and chronicity, this case improved with homoeopathic management. Numerous medications, including *Antimonium crudum*, *Arsenicum iodatum*, *Belladonna*, *Berberis aquafolium*, *Asteris rubens*, *Kalium bromatum*, *Hydrocotyl*, *Natrum muriaticum*, *Phosphorus*, *Sepia*, *Sulphur*, and others, are included in our homoeopathic Materia Medica and are beneficial in situations of acne. Through this case report, we have evidence that homoeopathy has an effective role in the management of acne [11, 12].

**Case report**

**Patient information**

On April 29, 2023, a 19-year-old woman complained of pustular and nodulocystic acne on her faces at the outpatient department of Sri Ganganagar Homoeopathic Medical College, Hospital, and Research Centre, Rajasthan. [Figure 1] The eruptions are unpleasant, extremely red, and filled with pus. She looked in the mirror and was filled with frustration and sadness. She was inconsolable. She past health history does not indicate any serious illnesses. At the time of reporting, she was not receiving any sort of medical care. Her older sister has been diagnosed with PCOD, and her mother has borderline diabetes. She was treating her problem with some of the topical ointment, but it wasn't helping much. Her menses are regular.

She was extremely sensitive to all outside stimuli, including the sun, sound, noise, smell, and reprimands. The majority of her ailments are from being scorned. She is quite tense about her health and the way her face looks, and she is very gentle and discreet when speaking to outsiders.

She was chilly patient and had a desire for ice creams and spicy food. On physical examination, nothing significant found.

**Diagnostic assessment**

She had seen a dermatologist for three months prior to my treatment, thus it was determined that she had nodulocystic acne/ Acne Vulgaris. To rule out other illnesses with acne as a common presentation, only standard examinations such as a complete blood count, erythrocyte sedimentation rate, thyroid profile, hormonal analysis, and fasting blood sugar were performed. As her menses and hormonal levels are normal so PCOD, hyperandrogenism were ruled out.

**The following characteristic symptoms were considered for repertorization**

1. Mildness
2. Anxiety about her health
3. Reserved and shy talking to strangers
4. Ailments from getting scorned
5. Chilly patient
6. Acne on the face
7. Eruptions on face with nodular appearance
8. Painful eruptions on face
9. Pustular eruptions on face
10. Desire for ice cream
11. Desire for spices

**Therapeutic intervention**

Using the Synthesis repertory and the Radar 10.0 software version, repertorization was carried out based on 11 rubrics. [Fig. 2]. *Phosphorus* (24/10), *Sulphur* (19/10), *Staphysagria* (12/9) and *Natrum muriaticum* (17/8) were the top four medications. *Phosphorus* was chosen after consulting Materia Medica because to the patient's cold disposition, ice cream and spicy food cravings, meek demeanour, and symptoms from being teased and having pustular breakouts. Therefore, on April 29, 2023, *Phosphorus* 30C, 1 dose, empty stomach, was administered. For the next 15 days, a placebo was given twice a day. She was told to stay away from junk food and fatty foods of any kind and not to pick at her pimples.

**Follow up**

The patient was followed up for 6 months with no complication or worsening of the acne during this period. During the period of treatment, patient improved symptomatically. Homeopathic aggravation of subjective or objective kind was not noted during the treatment as shown in Table 1 and Figure 3.
Table 1: Follow up and treatment history

<table>
<thead>
<tr>
<th>Date</th>
<th>Symptoms</th>
<th>Prescription</th>
</tr>
</thead>
<tbody>
<tr>
<td>29/04/2023</td>
<td>Pustular and nodulocystic acne on the face</td>
<td>1. <em>Phosphorus</em> 30C / 1 dose/ empty stomach early morning</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Placebo 30C/TDS/ 15 days</td>
</tr>
<tr>
<td>14/05/2023</td>
<td>No change noted in the acne</td>
<td>1. <em>Phosphorus</em> 200C / OD/ empty stomach early morning</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Placebo 30C/TDS/ 15 days</td>
</tr>
<tr>
<td>29/05/2023</td>
<td>Patient feels slightly better. There is slight improvement in the pustular eruptions on face.</td>
<td>1. <em>Phosphorus</em> 200C / OD/ empty stomach early morning</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Placebo 30C/TDS/15 days</td>
</tr>
<tr>
<td>13/06/2023</td>
<td>No new acne developed in the last 15 days</td>
<td>1. Placebo 30C/TDS/15 days</td>
</tr>
<tr>
<td>28/06/2023</td>
<td>No improvement observed. Complaints status quo</td>
<td>1. <em>Phosphorus</em> 1M/ OD/empty stomach early morning</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Placebo 30C/TDS/15 days</td>
</tr>
<tr>
<td>13/07/2023</td>
<td>Pustular acne on the face is better. No new eruptions are seen.</td>
<td>1. <em>SL</em> 1M/ 1 dose/ empty stomach early morning</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Placebo 30C/TDS/15 days</td>
</tr>
<tr>
<td>28/07/2023</td>
<td>No pain in eruptions, new acne appeared but not that pustular</td>
<td>1. <em>Phosphorus</em> 1 M 1 dose/ empty stomach early morning</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Placebo 30C/TDS/15 days</td>
</tr>
<tr>
<td>12/08/2023</td>
<td>The complaint reduced, the frequency of the new acne reduced, old pustular eruptions begin to heal</td>
<td>1. <em>Rubrum</em> 30C/TDS/15 days</td>
</tr>
<tr>
<td>27/08/2023</td>
<td>New acne appeared but not as hard and pustular as before. Slight itching started</td>
<td>1. <em>Phosphorus</em> 1 M 1 dose/ empty stomach/ early morning</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. <em>Rubrum</em> 30C/TDS/30 days</td>
</tr>
<tr>
<td>26/09/2023</td>
<td>Remarkable improvement in the nodulocystic acne</td>
<td>1. <em>Rubrum</em> 30C/TDS/30days</td>
</tr>
<tr>
<td>26/10/2023</td>
<td>Better, No new acne, face almost better</td>
<td>1. <em>Rubrum</em> 30C/TDS/30days</td>
</tr>
</tbody>
</table>

Discussion

In this case of Acne Vulgaris, homeopathic medicine, which was chosen based on homoeopathic principles, proved to be quite successful and produced positive effects. With the aid of Materia Medica [13] and Organon of Medicine [12], *Phosphorus* 30C was chosen due to his pustular eruptions, reserved demeanor, love of ice cream and spices, and inability to withstand cold temperatures. The course of treatment lasted for six months. Over the course of the treatment, there was a steady improvement. After 15 days, *Phosphorus* 200C was recommended because there had been little progress. *Phosphorus* 1M was administered when the case reached a standstill. The patient's vulnerability was taken into consideration when choosing the potency.

In addition to physical effects such as permanent scarring and disfigurement, acne has long lasting psychological effects which affect the patient’s quality of life. The evidence suggests that the impairment in quality of life can be alleviated by appropriate acne treatment. In this case, there was a marked improvement in both the patients’ main complaint and in the patient’s quality of life as shown in Figure no. 4. This case highlighted the importance of an individualized approach in such cases.

Fig 4 (A, B, C): At the end of the treatment on 26/10/2023

Conclusion

This case report has presented the successful treatment of nodulocystic pustular acne along with the improvement in the quality of life with individualized homeopathic treatment. We as a homeopathic fraternity needs to have more well- designed clinical studies to establish the role of homeopathy as one of the reliable treatment methods for such severe types of acne.

Declaration of patients consent

The authors declare that they have obtained all appropriate patients’ consent. The patient has consented for her images and other clinical information to be reported in the journal. All the efforts are made to conceal her identity but anonymity cannot be guaranteed.

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Conflicts of interest: Nil

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