

Role of ultra-high diluted *Calcarea sulphurica* 200cH in cases of cystic acne in the age group of 15 to 35 years: A case series

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ABSTRACT

Background: Acne is a chronic inflammatory disease of the sebaceous gland unit. It is one among the common skin diseases worldwide and occurs mainly at pubescence a prevalence of almost 95%. Cystic acne (CA) could be a severe kind of acne in which the pores of the skin become clogged, usually with dead skin cells leads to infection and inflammation. Acne is estimated to affect 94% of the world's population, making it the eighth most common disease worldwide. Epidemiological studies have shown that acne is more common in post pubertal adolescents, with boys being most affected, particularly in the more severe forms of the disease. Timely intervention with the proper treatment can help cystic acne from getting worse. Homoeopathy offers an effective result for this. The selection of homoeopathic medicines for CA is grounded on specific symptoms. This paper presents a case series 03 patients of CA were treated with classical homoeopathy instead of conventional methods. **Case Summary:** Homoeopathic medicine *Calcarea sulphurica* 200cH was used to treat three cases of Cystic acne (CA). Each case was followed up on with clinical observation and reported in accordance with the HOM-CASE guidelines. It was a monocentric, Phase 2 clinical trial, single arm, single blind, and randomized, interventional study. During each visit, the Global Acne Grading System (GAGS) was used to assess the efficacy of homoeopathic treatment. Within 1-2 months of treatment, all cases showed improvement in terms of managing acute inflammatory episodes in Cystic acne and improvement of mental stability of the patients. In all cases, the GAGS scores ranged from 11 to 0. Ultra- high diluted *Calcarea sulphurica* 200cH alleviated complaints associated with cystic acne.

Keywords: Cystic acne, Ice-pick scar, Androgen hormone, PCOS, GAGS, Homoeopathy.

INTRODUCTION

Acne is a chronic inflammatory disease of the sebaceous gland unit. ^[1] It is one among the common skin diseases worldwide and occurs mainly at pubescence a prevalence of almost 95%. ^[2] Cystic acne (CA) could be a severe kind of acne in which the pores of the skin become clogged, usually with dead skin cells leads to infection and inflammation. Cystic acne is a large, red, painful, and/or intensely itchy eruption of the skin. Cystic acne occurs when this infection penetrates deep into the skin and creates a pus-filled bump. If a cyst ruptures, the infection can spread and cause more breakouts. ^[3] Acne cysts are perhaps most noticeable on a person's face. However, they're conjointly common on the chest, neck, back, arms and will even develop on the shoulders and behind the ears. But they are also common on the chest, neck, back, arms and can even develop on the shoulders and behind the ears. Cystic acne tends to occur in people with oily skin, women, and older adults with hormonal imbalances. ^[4] Acne is estimated to affect 9 4% of the world's population, making it the eighth most common disease worldwide. Epidemiological studies have shown that acne is more common in post pubertal adolescents,

with boys being most affected, particularly in the more severe forms of the disease.^[5] About 15 to 30 out of 100 teenagers have moderate to severe acne. Severe cystic acne is more common in men. Women who get it often have cyst on the lower half of their face. Pain and itching are the main symptoms, which may lead to scarring.^[6] Timely intervention with the proper treatment can help cystic acne from getting worse. Homoeopathy offers an effective result for this. The selection of homoeopathic medicines for CA is grounded on specific symptoms. According to an article published in the Journal of the National Library of Medicine, 2018, homoeopathic medicines are salutary in the treatment of cystic acne.^[7]

MATERIAL AND METHODS

This case series comprises of four patients who attended the outpatient department at Shringi Homoeopathic Clinic & Research Centre, Bhilwara, Rajasthan.

It is monocentric, Phase 2 clinical trial, single arm, single blind, and randomized, interventional study to see the effect of *Calcarea sulphurica* 200cH in cases of cystic acne in the age group of 15-35 years. Cases presented with complaints of cystic acne with pain and pus-filled eruptions. Medicine was administered to all patients in no. 30 size globules and in the dosage of 4 pills once in a day daily orally, no water intake for at least 15-20 minutes. Drug was stored at Shringi Homoeopathic Clinic & Research Centre, Bhilwara, Rajasthan as per the prescribed criteria in Homoeopathic Pharmacopoeia of India (HPI), under appropriate temperature. Log no. & batch no. was maintained.

All participants were also asked to continue with their prescribed medication for duration of the study. Patients were enrolled in this study from outpatient department of Shringi Homoeopathic Clinic & Research Centre, Bhilwara, Rajasthan from the year 2021-2022 (approximately for 52 weeks).

Selection of Cases

Inclusion Criteria

All the patients presenting with cystic acne without any major complications, Patients of both sexes & age group between 15-35 yrs. The ability to give informed consent & comply with study procedures and Legal capacity.

Exclusion criteria

Patients who require emergency medical intervention or severe Co-morbidities, Patient without written consent, Limited communicative ability, Patients with any systemic illness, Patients with other skin diseases with cystic acne, Consumption of sedative medications, Person who is taking other mode of treatment.

Study Procedure

Total 03 Cases (both male & female) were selected based on inclusion, and exclusion criteria those who were wanted to participate willingly in the research. Participants were enrolled in the study only after signing the informed consent form. Each case was followed up for approx 4 months. 1st follow-up taken after 7 days, thereafter 15 days or earlier and/or later than per the need. Individual with any systemic illness were excluded from the study. Only clinical examination for cystic acne has been done before the enrolment in research study. Parameter used: Large pus-filled cyst, Large white bump, Redness, Tender or painful to the touch. The patients were then be categorized according to acne severity by Global Acne Grading System.^[8] No related confounders like yoga, physiotherapy etc. were being practiced by any of the following patients.

Global Acne Grading System (GAGS)

The GAGS is a quantitative scoring system to assess acne severity. It was first developed by Doshi, Zaheer and Stiller in 1997.^[9] The total severity score is derived from summation of six regional sub scores. Each is derived by multiplying the factors-2 for forehead, 2 for each cheek, 1 for nose, 1 for chin, 3 for both chest and back by the most heavily weighted lesion within each region (1 for \geq one comedone, 2 for \geq one papule, 3 for \geq one pustule, and 4 for \geq one nodule). The regional factors were derived from consideration of surface area and distribution and density of pilosebaceous units.^[10](Table 1).

Table 1: The Global Acne Grading System.

Location	Factor X Grade (0-4) = local score	
Forehead	2	Global score: 0 = None 1-18 = Mild 19-30 = Moderate 31-38 = Severe > 39 = Very severe
Right cheek	2	
Left cheek	2	
Nose	1	
Chin	1	
Chest & upper back	3	

Grade 0, No lesions; 1 \geq One comedone; 2 \geq One papule; 3 \geq One pustule; 4 \geq One nodule

Case Reports

CASE 1

An 18-year-old male was suffering from Pustular acne on face, neck and back with sensitiveness to touch, for the past 2 years, aggravated by the external heat. Patient suffers with migraine and frequent episodes of vomiting. There were numerous reddish yellow pustules especially on face, having no itching and burning. The complaint was aggravated in sunny weather and ameliorated by cold application. His thirst was increased (approx. 4 lit/day) and patient cannot eat full meal at a time, feels hungry at night. Patient was introvert, restless, want to be alone and having fear of darkness, thief, but prefers black color. Depending on the clinical symptoms and physical examination, the case was diagnosed as cystic acne (CA).

Medical history

The patient had a history of Jaundice at birth. Medical history and follow-up from 17 June 2021 to 19 August 2021, revealed that the patient was treated with Modern medicines, but there was no relief in symptoms. Depending on the modalities and pathological symptoms and on the knowledge of Homoeopathic Materia Medica, *Calcarea sulphurica* was prescribed in 200cH potency (Table 2; Fig. no.- 1 & 2).

CASE 2

A 22-year-old female patient was suffering from pus- and blood-filled acne in both the cheeks, chin and forehead region for the past 8 years. Along with pain and burning on face. Her pain was aggravated by bending downward and ameliorated by Lying down. There was a redness in face, which was aggravated by direct sun heat. cystic growth over his head, leading to itching. The perspiration was profuse while exertion, with oily face. Her appetite was moderate and she desired cold and salty food. She was averse to sour food especially tomatoes, it causes the aggravation of her ailments. Her thirst was decreased than before, and her tongue was clean and moist. Other physical generals included good sleep and sensitivity to cold (chilly). Her history revealed that she was suffering from Cystic tumor. The case was diagnosed as Cystic acne, especially depending on clinical symptoms and physical examination.

Medical history

She was treated with Natrum muriaticum but there was no relief from cystic swellings. Then, depending on the modalities and pathological symptoms and on the knowledge of Homoeopathic Materia Medica, *Calcarea sulphurica* was prescribed in 200cH potency (**Table 2; Fig. no.- 5&6**).

CASE 3

A 24-year-old female patient complained of painful acne on face, with black spots on both the cheeks, for the past 5 years. The pain was aggravated while washing her face but ameliorated by not touching the acne. The patient was thermally hot and had a moderate appetite, perspiration while eating. She was a vegetarian, desired sweets, cold things and had a decreased thirst. She had irregularities of menstrual cycle in the past. Family history was insignificant. She was averse to warm foods. Her face was oily, and her tongue was moist and embedded with multiple ranula on both sides. Mental generals included irritability and anger. Her history revealed that she was suffering from Uterine Fibroid. The case was diagnosed as cystic acne, depending on clinical symptoms and physical examination.

Medical history

Pulsatilla 30/200/1M did not relieve the patient from painful acne on face. Thus, depending on the modalities and pathological symptoms and on the knowledge of Homoeopathic Materia Medica, *Calcarea sulphurica* was prescribed in 200cH potency (**Table 2; Fig. no.- 9&10**).

Table 2: Follow-up of cases

Case No.	Case-1	Case-2	Case-3
Baseline	Date: 17 th June, 2021 GAGS: Score - 11 <i>Calc. sulph.</i> 200cH/6 doses 1 dose x ODACx 6 days	Date: 28 th December, 2021 GAGS: Score - 8 <i>Calc. sulph.</i> 200cH/ 6 doses 1 dose x ODAC x 6 days	Date: 10 th August, 2021 GAGS: Score - 8 <i>Calc. sulph.</i> 200cH/ 6 doses 1 dose x ODAC x 6 days
First Follow-up with Outcome	Date: 24 th June, 2021 C/o- The pain in the face is relieved, the patient feels mentally relax. New acne does not appear. GAGS: Score - 11 <i>Calc. sulph.</i> 200cH/15 doses 1 dose x ODAC x 15 days	Date: 04 th January, 2022 C/o- Reported no pain and no sensitivity. No new acne occurred. Relax mentally. Appetite improved. GAGS: Score-8 <i>Calc. sulph.</i> 200cH/15 doses 1 dose x ODAC x 15 days	Date: 17 th August, 2021 C/o- Resentment and anger has been reduced. No sweating while eating. No pain in the face. GAGS: Score-8 <i>Calc. sulph.</i> 200cH/ 15 doses 1 dose x ODAC x 15 days
Second Follow-up with Outcome	Date: 07 th July, 2021 C/o- No pain and no sensitivity are felt. No acne on neck, back and chin. Acne on right cheek also gone. GAGS: Score- 6 <i>Calc. sulph.</i> 200cH/20 doses 1 dose x ODAC x 20 days	Date: 20 th January, 2022 C/o- No acne on forehead and chin. General health restored. GAGS: Score- 5 <i>Calc. sulph.</i> 200cH/20 doses 1 dose x ODAC x 20days	Date: 03 rd September, 2021 C/o- No acne on cheeks, dark spots fading, no new acne. GAGS: score-4 <i>Calc. sulph.</i> 200cH/20 doses 1 dose x ODAC x 20 days
Third	Date: 28 th July, 2021	Date: 11 th February, 2022	Date: 24 th September, 2021

<p>Follow-up with Outcome</p>	<p>C/o- No sensitivity and no pain. New acne does not appear. The acne on the left cheek is also gone. (Fig. no.- 3&4) GAGS: Score-0 <i>Calc. sulph.</i> 200cH/20 doses 1 dose x ODAC x 20 days</p>	<p>C/o- All acne disappears. Improved overall. (Fig. no.- 7&8) GAGS: Score-0 <i>Calc. sulph.</i> 200cH/20 doses 1 dose x ODAC x 20 days</p>	<p>C/o- General health, menstruation, oily skin has become normal. No new acne and new complaints were noticed. (Fig. no.- 11&12) GAGS: Score-0 <i>Calc. sulph.</i> 200cH/20 doses 1 dose x ODAC x 20 days</p>
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RESULTS

To summarize, all 03 (Three) patients reported here recovered from CA on an average of 42 days with no relapse for more than 12 months after resolution of the clinical signs. There was no requirement to resort to conventional methods of the treatment for managing Cystic acne acute inflammatory episodes during homoeopathic treatment and mental stability of the patients was observed to improve in due course.

CASE 1

Before Treatment



Fig. No.: 1

Fig. No.: 2

After Treatment



Fig. No.: 3

Fig. No.: 4

CASE 2

Before Treatment



Fig. No.: 5



Fig. No.: 6

After Treatment



Fig. No.: 7

Fig. No.: 8

CASE 3

Before Treatment



Fig. No.: 9



Fig. No.: 10

After Treatment



Fig. No.: 11

Fig. No.: 12

DISCUSSION

Cystic acne (CA) is one of the most common skin diseases in youngster's which have a worldwide prevalence. In India prevalence rate is of 85% and if not treated on time it may lead to complications and also affect the quality of life. The present study was primarily aimed to investigate the effectiveness of the homoeopathic medicine *Calcarea sulphurica* 200cH in the management of cases of cystic acne between the age group 15-35 years. Kinds of research have been done earlier in homoeopathic system on cystic acne but very little work has been done on specified and targeted homoeopathic medicine *Calcarea sulphurica* 200cH. In this study 05 cases of CA patients were selected; among them 03 patients completed the study. They were subjected for 10-12 weeks of treatment with *Calcarea sulphurica* 200cH after proper case taking and the change in skin before and after the treatment were evaluated, which showed a positive effect on the CA of the patients in the study sample.

From the essence of the available literatures regarding this medicine *Calcarea sulphurica*, its symptoms were very marked in the patients, like unhealthy skin, discharging pus; they do not heal readily; yellow, purulent crusts or discharge; purulent exudations in or upon the skin. [11]

This case studies have shown a positive role of homoeopathic medicine in treating and improving the complaints through Global Acne Grading System. *Calcarea sulphurica* is used frequently by homoeopathic practitioners. We have used red line indications of the medicine, which are very relevant to the disease condition. Using this medicine, we got excellent results in CA complaints, including better quality of life in a painless way and no adverse events from the multiple fractional doses of the medicine.

CONCLUSION

The case series suggests that homoeopathy can be considered as an effective method for the treatment of cystic acne (CA). It can be adopted as an alternative public health approach in restraining the high prevalence of cystic acne. A larger number of cases and rigorous trials can be carried out to further confirm the results.

DECLARATION OF PATIENT CONSENT

The authors certify that they had obtained all appropriate consent from the patients for their investigation reports and other clinical information to be reported in the journal. The patients were made to understand that their name and initials will not be published, and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

Conflict of Interests

Authors declare no conflict of interest.

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