

## Original Research Article

# A study of potency determination of 3C antimonium crudum in the treatment of corn

Rekha Kumar<sup>1\*</sup>, Aarti Prajapati<sup>2</sup>, Pooja Prajapati<sup>3</sup>

<sup>1</sup>Department of Repertory, Ram Krishna College of Homeopathy and medical sciences, RKDF University, Bhopal, Madhya Pradesh, India

<sup>2</sup>Department of Pharmacy, Quantum School of Health Sciences, Quantum University, Roorkee, Uttarakhand, India

<sup>3</sup>Department of Obstetrics and Gynecology, Laxmi Narayan Medical College and Research Center, JK Hospitals, Bhopal, Madhya Pradesh, India

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**\*Correspondence:**

Dr. Rekha Kumar,

E-mail: [poojaprajapati106@gmail.com](mailto:poojaprajapati106@gmail.com)

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### ABSTRACT

**Background:** Planter skin is anatomically different from the normal skin of the body due to prominence of keratin filaments such as k6, k7, k9, k16 and k17. As per Hahnemann statement in chronic disease, Antimonium crudum is basically the native ore (persulphuric of antimony) found in blocks of parallel block needle with a metallic lustre and are composed of twenty-eight parts of sulphur combined with 100 parts of metallic antimony.

**Methods:** An observational comparative prospective open label study was conducted from September 2019 to September 2020. 32 patients were included in the study. Follow up of the cases were done after every 15 days where the size of the corn was measured using a vernier caliper. Height, width and diameter of the corn was also measured pre and post-treatment to analyse the results.

**Results:** A total of 32 patients were studied. The size of the corn was considerably reduced after taking the medication. There was a significant reduction in the intensity of the pain due to corn after medication as well.

**Conclusions:** There is a significant reduction of disease intensity score, after the homeopathic treatment. Which shows the efficacy and potency of 3C Antimonium crudum in the treatment of corn.

**Keywords:** Corn, Potency, Efficacy, Potency, 3C antimonium crudum

### INTRODUCTION

Corn is very well differentiated and generally less than 1.5 cm in diameter show exaggerated and skin blot with hemorrhage, yellow discoloration or hyper pigmentation. It occurs due to thickening and increase in the density of the epidermal cells. Planter skin is anatomically different from the normal skin of the body due to prominence of keratin filaments such as k6, k7, k9, k16 and k17.<sup>1</sup> Symptomatic corn is most commonly treated with the

excision of tissue; however, recurrence is very common with excision.

Salicylic acid, a keratolytic agent in a collodion form (20%), applied for a few nights followed by soaking with hot water is usually effective in removing a corn. As per Hahnemann statement in chronic disease, antimonium crudum is basically the native ore (tersulphuret of antimony) found in blocks of parallel block needle with a metallic lustre and are composed of twenty-eight parts of sulphur combined with 100 parts of metallic antimony.<sup>2</sup>

## METHODS

### Study design

The study was an observational comparative prospective open label study.

### Study place

The study was conducted in the Government Homeopathic Medical College and Hospital, Bhopal, India and its OPD and camps along different peripheries that are organized by GHMC.

### Study duration

The study period was from September 2019 to September 2020.

### Inclusion criteria

Patients suffering from corn and aged between 14-65 years were included in the study.

### Exclusion criteria

Patients have other systematic diseases and skin manifestations; patients with alcoholism and drug addition; and patients who are pregnant were excluded.

### Procedure

The data for the study was taken from OPD, IPD and various camps that were organized by the department. Patients were selected based on the inclusion criteria and as per the principles of homeopathy. The sample size of the study was 32. After every 15 days, follow up of the patients were taken. A measuring scale/vernier calipers was used to measure the size of the corn. Height, diameter and width of the corn was recorded both pre and post treatment to determine the effectiveness of antimonium crudum 3C on corns.

### Homoeopathic scales of potentisation

The centesimal potency scale was introduced by Hahnemann. According to this scale, the first potency contains 1/100 part of the drug and second potency had 1/100 part of the first potency and so on. The letter C denoted the potency in this scale. 9 main scales is equivalent to 10 vernier scale.

Least count=1 main scale division-1 vernier scale division, 1 main scale division-1, 1 vernier scale division 9/10 mm =0.9 mm,

Least count=1 mm-0.9 mm=0.1 mm, Dimension to be measured-main scale reading+(vernier scale reading×least count).

### Statistical analysis

Statistical analysis was performed using the statistical package for the social sciences trial version 18.0 software (SPSS) and MS excel 2007 spread sheet. For all statistical analysis p=0.05 had been considered statistically significant.

## RESULTS

A total of 32 patients were studied, among which, 15-25 years (37.5%) was the most prevalent, followed by 21.88% each in both 36-45 years and 46-55 years; and 9.38% each in both 26-35 years and 56-65 years. Females (65.63%) were majorly affected when compared to males (34.38%).

**Table 1: Comparative by size of corn before and after treatment.**

Size of corn (mm) before medicine	Size of corn (mm) after medicine
6.4	3.9
8.1	4.7
10.8	6.8
8.1	4.9
4.9	4.9
7.2	4.2
7.3	6.2
8.1	4.1
7.8	3.8
6.3	6.3
6.9	4.1
8.1	5.9
7.3	5.2
8.2	5.9
14.8	6.8
10.1	3.0

It was seen that in the majority of the corn cases, there was a slow progression (78.12%) of corn growth. Only 21.87% of cases showed a rapid corn progression. However, the nature of the progression of the corn also depends on several other factors like age, corn history, and other diseases/co-morbidities.

In most of the cases, there were no recurrences of the corn (71.87%). However, some cases showed recurrences as well (28.12%).

The maximum number of cases showed soft consistency (71.87%) of the corn, regular margins (75%), and normal coloration (68.7%) as opposed to other cases which showed hard, irregular, and discoloration of the corn.

Table 1 shows that the size of the corn considerably reduced after taking the medication. There was a significant reduction in the intensity of the pain due to corn after medication as well (Table 2).

**Table 2: Comparison between pain in corn before and after the treatment.**

Pain in corn before medicine	Pain in corn after medicine
4	0
4	1
4	1
4	1
4	1
3	1
4	1
3	1
3	1
4	1
4	1
3	2
2	0
2	0
3	1
3	2

## DISCUSSION

In our study, antium crudum, for the treatment of corns of the feet and all corneous warts was found to be full of potential, with less possibility of recurrence of corns. However, in a study done by Hughes et al, it was seen that the corns which were close to the toes and soles of the feet always returned back after been cut off, even when it was treated with antim crud.<sup>2</sup> Hahnemann stated that antimonium crudum is the native ore of tersulphuret antimony which comprises of 28 parts of sulphur combined with 100 parts of metallic antimony, which is used in chronic disease treatment.

There were also several instances when it was cured as well.<sup>3</sup> Fortier suggested that when the treatment was recurrent for a longer duration of time, it helped to make the corn tolerable to a certain level.<sup>4</sup> Antim crudum was reported to act on the skin barrier to produce thick and horny callosities in tissues.<sup>5</sup>

In a study done by Gupta et al antium crudum was described as the choice of treatment for corns.<sup>6</sup> Antium crudum is listed as the 30<sup>th</sup> potency for homeopathy use.<sup>2</sup>

Another study similar to ours was done by Kent et al on repertory corns.<sup>7</sup> Burt et al found that antium crudum has the potential to produce corn in its crude form, which is large and horney at the soles close to the toes.<sup>8</sup> It was also found out that the corns usually became inflamed and overly-sensitive. However, some effectiveness of the drug in curing corns and callosities have also been reported.<sup>8</sup>

According to another study done by Kent et al antimonium crudum produced hard horny excrescences growth of corns with high intensity of pain at the end of

the finger. It also produces a callosity and unusual thickening of the skin in the soles of the feet.<sup>9</sup>

Bhatia claimed that the sensitiveness of the sole on walking with a stitching aching pain in the corn alongwith most of the symptoms related to the skin was closely related with constipation and diarrhoea.<sup>10</sup>

When large horny corns with thick skin on the sole of the feet made the pain intense and aching, and walking became very difficult, antimonium crudum was indicated for it.<sup>11</sup>

## Limitations

One limitation of the study was many patients were lost to follow-up until the complete cure of the disease. Lack of patience was also a major drawback for patients who wanted instant relief from the pain.

## CONCLUSION

It can be concluded that corn can be a hereditary disorder as well as opposed to purely resulting due to the application of mechanical pressure. Antimonium crudum was found to be a good treatment option for corn instead of surgical intervention.

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