**ORIGINAL ARTICLE**

# CLINICAL VERIFICATION OF THE SYMPTOMS OF CONTACT DERMATITIS OF GRAPHITIS BY ASSESSMENT THROUGH LIKELIHOOD RATIO

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**Abstract**

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**Background-**Contact dermatitis is an inflammatory process in skin caused by an exogenous agent or agents that directly or indirectly injure the skin. This injury may be caused by an inherent characteristic of a compound- irritant contact dermatitis (ICD). **Aim**- To evaluate the clinical verification of symptomatology of Graphitis in contact dermatitis. Methodology- This was a Clinical study. 100 cases were selected. Detailed case taking was done in especially designed case taking proforma. Cases were reviewed at the interval of 15 days using assessment scale Likelihood Ratio and data were recorded for minimum 6 follow-ups. The before treatment and after treatment symptom scores were compared applying appropriate statistical techniques paired t-test. **Results-** it is observed that $|t| = 16.824 > tc = 1.984$, it is then concluded that the null hypothesis is rejected. Using the P-

value approach: The p-value is p=0, and since p=0<0.05, it is concluded that the null hypothesis is rejected. **Conclusion-** Homoeopathic medicine Graphitis has been found significantly effective in cases of contact dermatitis.

## INTRODUCTION

Contact dermatitis is an inflammatory process in skin caused by an exogenous agent or agents that directly or indirectly injure the skin. This injury may be caused by an inherent characteristic of a compound- irritant contact dermatitis (ICD). Chronic low-grade irritant dermatitis is the most common type of ICD, and the most common area of involvement is the hands. The most common irritants encountered are chronic wet work, soaps, and detergents. Females were twice as commonly affected as males, and in 35% of cases the hand eczema was thought to be irritant in nature.Topical corticosteroids have been the mainstay in the treatment of eczema for more than three decades and are still the preferred agents in the symptomatic management of this clinical entity. The existing research evidence for homeopathy in atopic dermatitis remains inconclusive regarding the efficacy of the therapy. Graphites archaically referred to as plumbago, is a crystalline form of the element carbon with its atoms arranged in a hexagonal structure. In homeopathic literature, it has been mentioned for the treatment of CD. However, no systematic research has yet been conducted using graphites in CD. Thus the study here aimed to explore the utility of Homoeopathic medicine Graphitis in cases of Contact Dermatitis.

## OBJECTIVES

- To evaluate the clinical verification of symptomatology of Graphitis in contact dermatitis.
- To ascertain the utility of Likelihood ratio as assessment scale in cases of contact dermatitis.

## MATERIAL & METHODOLOGY

**Study Design & Setting-** This was a Clinical study. The study was conducted at Sri Ganganagar Homoeopathic Medical College, Hospital and Research Institute, Sri Ganganagar, Rajasthan.Study duration was one year.

**Inclusion Criteria-**

- Diagnosed Patients of both sex and all age.
- Cases which were at that point analyzed and who are on some other treatment (allopathic) were additionally taken into consideration.

**Exclusion Criteria-**

- ➢ If tolerant is experiencing multi-organ disappointment.
- ➢ Cases with other skin issues like psoriasis, contagious, disease and so on.
- ➢ Pregnant lady and lactating moms.

**Sample Size-**100 cases were selected by using simple random sampling method.

**Intervention-**Homoeopathic medicine Grahitis.

**Assessment of Progress**- Detailed case taking was done in especially designed case taking proforma. Cases were reviewed at the interval of 15 days using assessment scale Likelihood Ratio and data were recorded for minimum 6 follow-ups. The before treatment and after treatment symptom scores were compared applying appropriate statistical techniques paired t-test.

**Outcome assessment & Result:** Changes of scores from before treatment and after treatment were calculated as below:

$$\% = \frac{\text{Before treatment Score} - \text{after treatment Score} \times 100}{\text{Before treatment Score}}$$

**Statistical Analysis** was done through applying appropriate statistical tests on Pre and post treatment scores.

**Research hypothesis-**

- ➢ **Null Hypothesis (H$_0$)-** As per null hypothesis there is no relationship between two variable studded and

results are due to chance and are not significant in terms of supporting the theory being investigated.

- ➢ **Alternate Hypothesis (H$_1$)-** As per alternate hypothesis there is a relationship between two variable being studded and results are not due to chance and that they are significant in terms of supporting the theory being investigated.

At 5% level of significance.

**OBSERVATIONS & OUTCOME-**

The data obtained was recorded in especially designed case taking proforma, and sorted out in the form of different tables and charts as below:
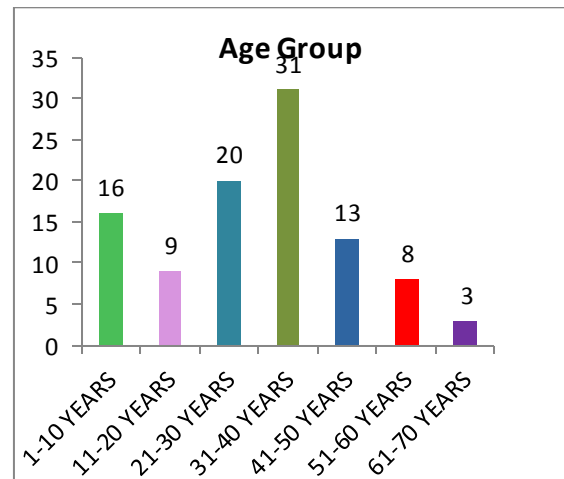
**Age Distribution**



Fig 1 Age Distribution

In this study of 100 cases maximum cases i.e. 31 (31%) were observed between 31-40 years of age.
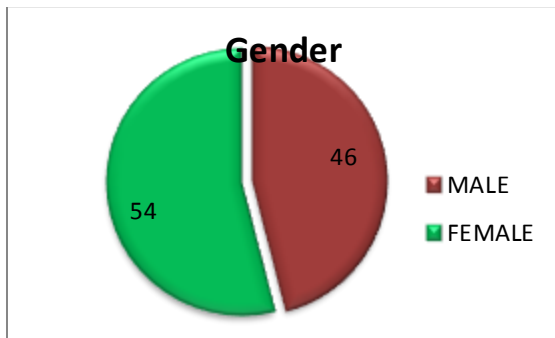
## Gender Distribution



Fig 2 Gender Distribution

In study of 100 cases there were 46 no. of male patients i.e. 46% of cases & 54 no. of females i.e. 54% of cases.
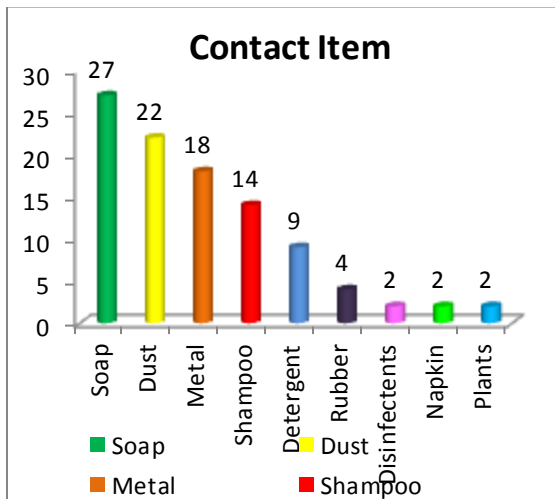
## Contact Item



Fig 3 Cintact Item

In study of 100 cases maximum cases i.e. 27 patients (27%) were of Soap.
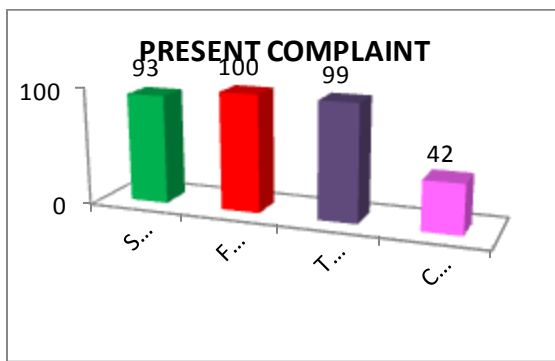
## Present Complaint



Fig 4 Prasent Complaint

In this study of 100 cases in maximum cases i.e. 100(100%) cases present complaint was foul and thick discharge.
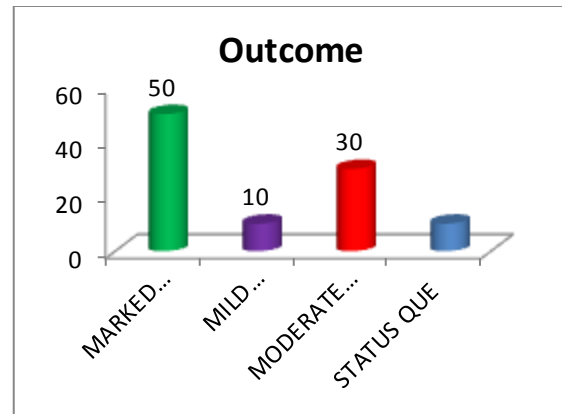
## Outcome



Fig 5 Outcome

In study of 100 cases 50 patients i.e. 50% of the cases were marked improvement, 30 patients i.e. 30% of the cases are still Moderate improvement the treatment & 10 patients each i.e. 10% of the cases in Mild Improvement and Status Que.

## RESULT

Since it is observed that |t| =16.824>tc=1.984, it is then concluded that the null hypothesis is rejected. Using the P-value approach: The p-value is p=0, and since p=0<0.05, it is concluded that the null hypothesis is rejected.

## Discussion

In this study of 100 cases maximum cases i.e. 31 (31%) were observed between 31-40 years of age. In study of 100 cases there were 46 no. of male patients i.e. 46% of cases & 54 no. of

females i.e. 54% of cases. In study of 100 cases maximum cases i.e. 27 patients (27%) were of Soap. In this study of 100 cases in maximum cases i.e. 100(100%) cases present complaint was foul and thick discharge. In study of 100 cases 50 patients i.e. 50% of the cases were marked improvement, 30 patients i.e. 30% of the cases are still Moderate improvement the treatment & 10 patients each i.e. 10% of the cases in Mild Improvement and Status Que.

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## CONCLUSION

Homoeopathic medicine Graphitis has been found significantly effective in cases of contact dermatitis.
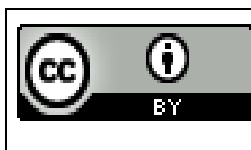
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