
Role of homeopathic medicine graphites30 and individualized homeopathic medicines in cracked heel in age group of 18-70 years, A randomized Control trial

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Abstract:

Background: "Heels fissures," another name for cracked heels, are a quite common foot condition^[1] In this study an attempt has been made to study the effectiveness of Homeopathic Medicine Graphites30 and Individualized homeopathic medicines in the cases of cracked heel in age group of 18-70 years. **Aim & Objective:**1] To Study Effectiveness of Homeopathic Medicine Graphites30 and Individualized Homeopathic Medicines in cracked heel in age group of 18-70 years. 2] To find out the most commonly prescribed Individualized Homeopathic Medicines in cracked heel. **Material & Method:** 30 samples with cracked heels were consider according our inclusion criteria and divided into two group: Experimental group was given Graphites30 while control group was given individualized homeopathic medicines and "SPSG Scale" was utilized for treatment assessment. Participants with a history of diabetes, hypothyroidism, taking steroid treatment, Pregnant and lactating women were excluded. **Result:** By using Unpaired t test calculated t value (-1.6345) which was less than table value of t (2.05) hence Null hypothesis is accepted. **Conclusion:** In these study Individualized Homeopathic Medicines (5.26) shows more improvement in cases cracked heel than Graphites30 (7.06) on the basis of "SPSG Scale" (Six Point Special Grading Scale)

Keywords: Cracked heels, Individualized Homeopathic Medicines, Graphites30, "SPSG Scale"

Introduction:

"Heels fissures," another name for cracked heels, are a quite common foot condition^[1] Splits or fissures in the skin's surface called heel fissures can result from anhidrosis and may or may not be accompanied by hyperkeratosis. At this early stage, epidermal fissures are superficial and not regarded as wounds. But when pressure is applied, these cracks become deeper and involve the dermis, which causes them to bleed and which result in pain on weight bearing activities.^[2]

Treatment for cracked heels is more difficult to treat if the skin surrounding the heel's rim is thicker or callused. Cracked heels are typically the result of dry skin, or xerosis. The cracks or fissures may get infected in severe cases.^[1] Heel fissures or cracks in diabetic patients damage the epidermis; deep fissure damage to the dermis can result in bacterial infection, ulceration, and amputation as well.^[3]

Epidemiological data:

According to the (IJDVL) Indian journal of dermatology venerology and leprology "prevalence and correlates of fissure foot in a rural area in Tamil Nadu" the prevalence is found to be more the females (58.4%) than males (33.3%). The difference was statistically significant in each age group the prevalence among the females was more than males but attains statistical significance only in the age group 25-34 years. Maximum prevalence over all is observed in age group 55-64 years.^[4]

AIM:

To Study Effectiveness of Homeopathic Medicine Graphites 30 and Individualized Homeopathic Medicines in cracked heel in age group of 18-70 years.

OBJECTIVE:

Primary objective- To identify the role of Homeopathic Medicine Graphites 30 and Individualized Homeopathic Medicines in cracked heel.

Secondary objective- To find out the most commonly prescribed Individualized Homeopathic Medicines in cracked heel.

Review of Literature**Operational definition:**

Cracked heels refers to a condition produce by occurrence of fissures in abnormally hard, dry skin over the heels of feet,^[17] whose severity depends on 1. Cracks associated with pain 2. Cracks of the feet 3. Depth of the crack 4. Roughness of the feet 5. Dryness of feet 6. Itching of the feet.

Pathophysiology:

The sole of foot is the counterpart of the hand. Muscles are arranged in four layers with the neurovascular bundles between first and second layers and then between third and fourth layers. There is only one plantar arch in the sole. The tendons and muscles of the sole maintain the arches of the foot. The arches of the foot serve as elastic springs for efficient walking, running, jumping and supporting of body weight. The foot is an organ of support and locomotion. Accordingly, the structures of the foot that modified.^[5] Hypertrophy of the stratum corneum, known as hyperkeratosis, is one of the primary protective responses and thought to be triggered by increases in external mechanical stresses. During hyperkeratosis dermal and epidermal cells react to be stress by generating inflammatory cytokines which cause the incomplete differentiation of corneocytes. In the foot hyperkeratosis presents as calluses, corns and heel fissures.^[6]

Causes of the cracked heel: ^[7]

1. Extreme heat and dry climate.
2. Obesity, overweight can put lot of pressure on the heels.
3. Poor hygienic conditions.
4. Standing position for long period of time in damp areas.
5. Bare foot walking, housewife's, farmers.
6. Vitamins, minerals and zinc deficiency.
7. Working in water for longer period of time.
8. Systemic conditions- ^[30] Atopic dermatitis, Juvenile plantar dermatosis, Psoriasis particularly palmoplantar psoriasis, Palmoplantar keratoderma.
9. Any systemic condition that can cause dry skin, e.g. hypothyroidism or diabetes.

Signs and symptoms:

1. Dryness and peeling of the skin.
 2. Callus formation and cellulitis.
 3. Redness and flaky patches on the skin.
 4. Cracks or fissures on the rim of the heels or soles.
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5. Itching of the skin.
6. Discharge or bleeding from the cracks in heels.
7. Pain and restriction of movements present.

Treatment: ^[3]

In modern medicine, there are wide range of emollients available that can be used to prevent and treat dry and crack heels. The commonly used products are- Urea based product, Salicylic acid-based product, Alpha-hydroxy acids, Humectants.

Tropical cream are sometimes insufficient in patients with deeply crack heels and other treatment options may be required such as: Use of adhesive tissue glue, Using an orthotic device, eg. heel pads, along with appropriate enclosed footwear.

In ayurvedic system of medicine management of crack heels include- Centella asiatica leaf extract has an important role in wound healing, Euphorbia caducifolia- contain antibacterial, antifungal and anti- microbial properties, Termanalia chebula, Vrukshamla beeja talia, Sesamum indicum.

Home remedies for cracked heels: Coconut oil, Almond oil, Olive oil, Turmeric, Honey, Alove- vera

Homoeopathy in fissure feet:

Homoeopathy treats the patient as a whole. It means that homoeopathic treatment focuses on the patient as a person, as well as his pathological condition. The homoeopathic medicines are selected after a full individualization examination and case-analysis which include the medicinal history of the patient, physical and mental condition etc. Miasmatic tendency (predisposition/susceptibility) is also taken into account for the treatment of chronic conditions.^[22]

Graphites:

It affects folds on the skin throughout the body characterized by great itching. Worse at night. There is a burning sensation. There is a characteristic thin sticky acrid offensive gluey discharge which oozes from the skin. The affected part burns after scratching and there is tendency to form cracks and fissures. When skin is cleaned with warm water it aggravates. Better in open air.^[10]

Methodology:**Material and Method:**

1. **Study design** – Randomized control trial
 2. **Location** – M(N)HMC OPD, IPD, peripheral camps
 3. **Duration of study**- 6 months
 4. **Sample Size**- 30 Case taken for study
 5. **Inclusion criteria:**
 - i. All sex and Age group – Between the age group of 18-70 years
 - ii. The patient with minimum 1 point in the “six-point special grading scale which include following measure: 1. Cracks associated with pain 2. Cracks of the feet 3. Depth of the crack 4. Roughness of the feet 5. Dryness of feet 6. Itching of the feet.
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6. Exclusion criteria:

- i. The participants with known case of any systemic disease or from any autoimmune disease.
- ii. The participants taking any steroid treatment.
- iii. Pregnant and lactating women.
- iv. Known case of diabetes and hypothyroidism.

7. SPECIFICATION OF INSTRUMENTS:

- a) Screening questionnaires.
- b) Consent form
- c) Before and after treatment photos.
- d) Six points for special grading of the signs and symptoms of cracked heel is given below:
 - [18]
 - 1. Cracks associated with pain
 - 2. Cracks of the feet
 - 3. Depth of the crack
 - 4. Roughness in the feet
 - 5. Dryness of the feet
 - 6. Itching of the feet

8. Research Methodology:

Sample size-30

Sampling technique- Convenience Sampling

Experimental Group-will be given Homeopathic Medicine Graphites 30

Control Group- will be given Individualized Homoeopathic Medicine

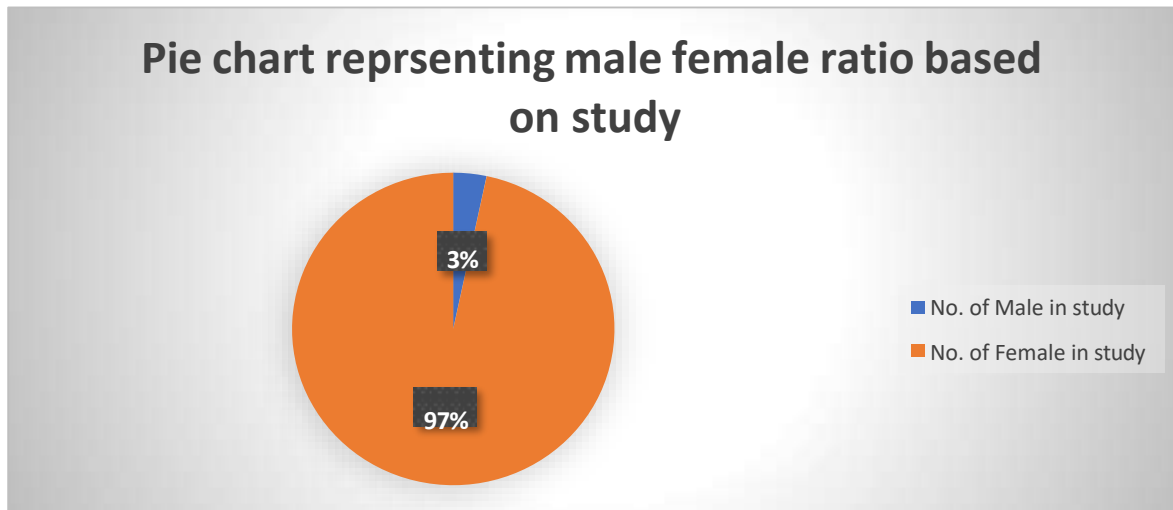
9. Source of data collection:

The present study consisted 30 patients of cracked heels between age group of 18-70 years who attended the OPD at Motiwala (National) homoeopathic medical college and hospital, Maharashtra. 30 patients of cracked heel were selected on basis of inclusions and exclusion criteria. Cracks were measured by the above-mentioned scales.

Observation and Statistical Analysis:

Table 1 – Male Female ratio based on study		
	No. Male in study	No. Female in study
No. of patients	1	29

1. Male female ratio:



Age Group in Years	No. of patients
18-30 Years	20 (66%)
31-40 Years	5 (17%)
41-50 Years	3 (10%)
61-70 Years	2 (7%)

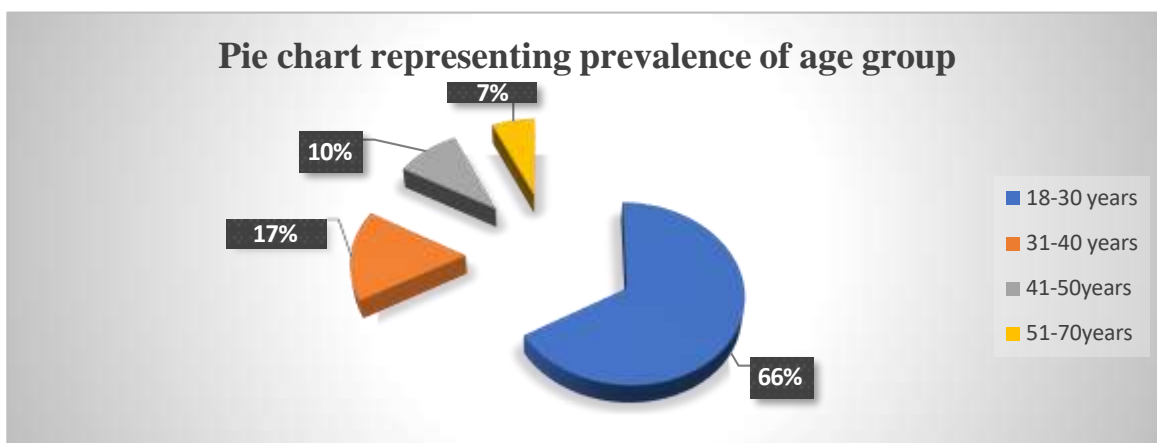


Table 3 – Effectiveness of Graphites30-

SPSG Scale Criteria	No. of patients	Percentage
Complete remission	02	13%
Marked improvement	06	40%
Moderate improvement	04	27%
Mild improvement	03	20%
Unchanged	00	00%

Pie chart representing effectiveness of Graphites30

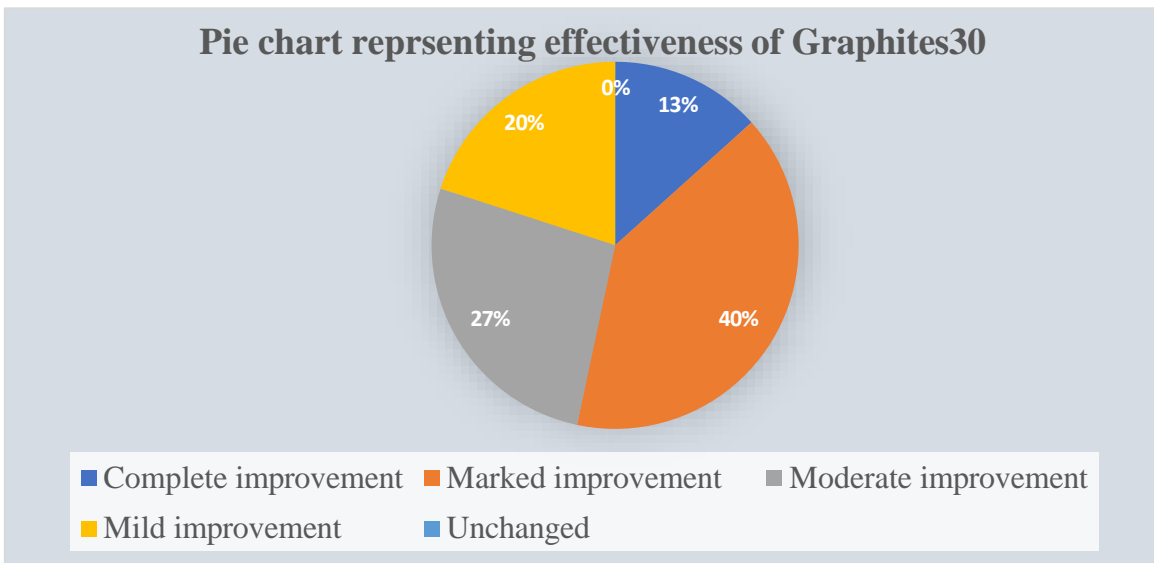


Table 4 – Effectiveness of Individualized Homeopathic Medicines-

SPSG Scale Criteria	No. of patients	Percentage
Complete remission	06	40%
Marked improvement	05	33%
Moderate improvement	04	27%
Mild improvement	00	00%
Unchanged	00	00%

PIE CHART REPRESENTING EFFECTIVENESS OF INDIVIDUALIZED HOMEOPATHIC MEDICINES

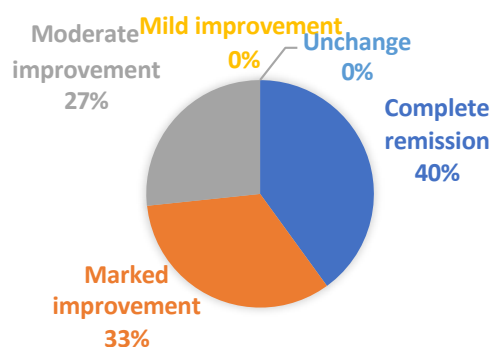


Table 5 – Average score Graphits30 and Individualized homeopathic medicines-

Average Score	Individualized homeopathic medicine	Graphites30
Before treatment	13.67	13.73
After treatment	5.26	7.06

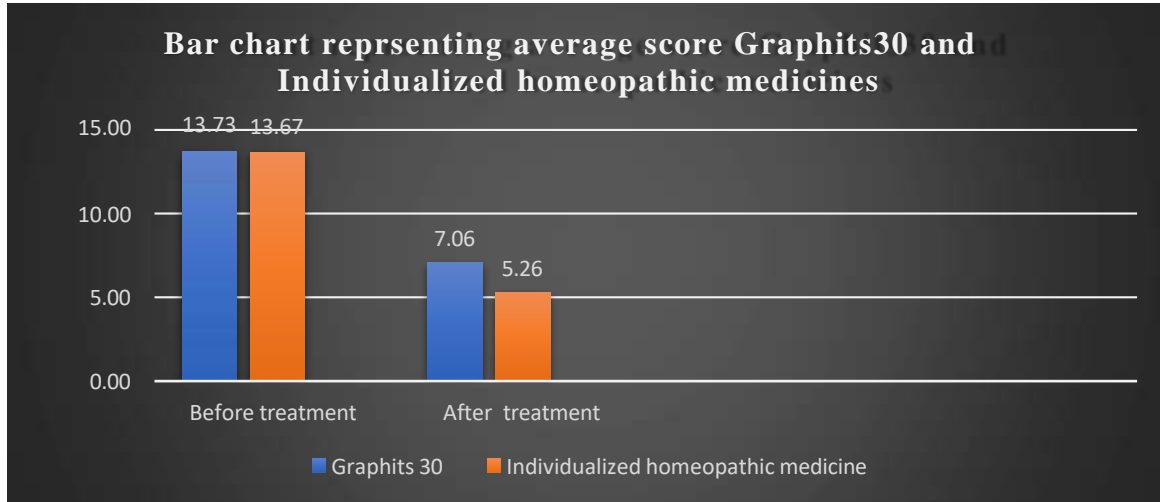
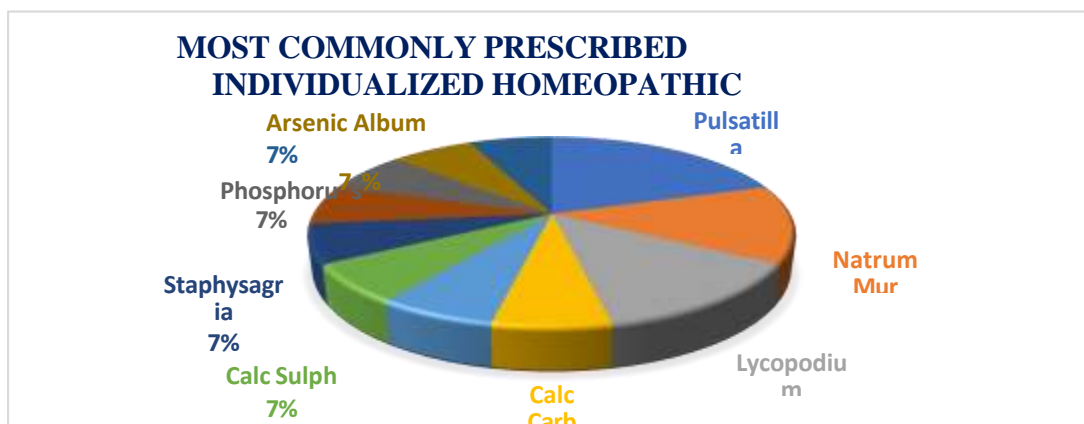


Table 6 – Average score Graphits30 and Individualized homeopathic medicines-

Commonly prescribed medicines	No. of patients	Percentage
Pulsatilla	3	20%
Natrum mur	2	13.33%
Lycopodium	2	13.33%
Calc Carb	1	6.66%
Calc Flour	1	6.66%
Calc Sulph	1	6.66%
Staphysagria	1	6.66%
Silicea	1	6.66%
Phosphorus	1	6.66%
Arsenic Album	1	6.66%
Carsinosin	1	6.66%

Result:



According to Unpaired t test Null hypothesis is accepted as calculated t value (-1.6345) which is lesser than table value of t (2.05). That is Homeopathic Medicine Graphites30 not effective than Individualized Homoeopathic Medicines in cracked heel in age group of 18-70 years. However Individualized homoeopathic medicine is more effective than Graphites30 in cases of cracked heel. In experimental group (graphites30) 13.33% cases are completely improved, 40% cases are markedly improved, 27% cases are moderately improved and 20% cases are mildly improved. In control group (Individualized homoeopathic medicine) 40% cases are completely improved, 33% cases are markedly improved, 27% cases are moderately improved.

Discussion:

The aim behind choosing such topic was progressing health issues due to cracked heels and also to know the effectiveness of Graphites30 and Individualized homeopathic medicine. This study was conducted on 30 patients for 6 months in Motiwala (National) homeopathic college according to our inclusion and exclusion criteria, 30 patients were considered from which 15 patients were prescribed with Graphites30 and 15 patients were prescribed individualized homeopathic medicines with help of convenience sampling. After the study of 6 months, we observed that out of 30 patients, all 30 patients are improving that is the “SPSG Scale” score is reduced which was measured by using “SPSG Scale”. The mean score of “SPSG Scale” before the treatment was 13.7% and after the treatment the mean score reduced to 6.16%. In our study there was 29 female and 1 male patient out of 30 patients, and the demographic analysis revealed that Cracked heels are more prominent in female patients. The highest incidences of cracked heel was noted in the age group of 18-30 years (66%), while the lowest incidences was seen in the age group of 31-40 years (17%), 41-50 years (10%) and 61-70 years (7%). As our study is conducted from July to January, as the moisture contain in the environment is increased during this period it might have accelerate the process of healing. In our study we observed that Individualized homoeopathic medicine reduced the severity of cracked heels according to “SPSG Scale” score effectively as compare to Graphits30.

Conclusion:

In these study Individualized Homeopathic Medicines shows more improvement in cases cracked heel than Graphites30 on the basis of “SPSG Scale” (Six Point Special Grading Scale) thus Individualized homoeopathic medicine is more effective than Graphites30

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