

## PalArch's Journal of Archaeology of Egypt / Egyptology

### EFFECT OF HELICHRYSUM OIL ON ARTHRITIS

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**Hemaanhini Tamilmani, R Gayatri Devi, Jothi priya.A. EFFECT OF HELICHRYSUM OIL ON ARTHRITIS-- Palarch's Journal Of Archaeology Of Egypt/Egyptology 17(7), 1981-1985. ISSN 1567-214x**

**Keywords: Arthritis, helichrysum oil, pain, inflammation**

#### ABSTRACT

Helichrysum oil is used as a traditional method to treat many diseases. It has an antioxidant, antimalarial and also anti cancer properties. Arthritis is an inflammatory disease which in negligence can lead to joint destruction and other disabilities. Arthritis has various stages and has no specific test for diagnosing arthritis. Massaging oil on the knee can reduce the pain intensity. Essential oils like helichrysum oil can also be used to overcome pain. Oil was given to a total of 15 participants- age between 30- 40 years- applied for a span of 30 days- pain was measured through pain scale. From this study, it showed that before the usage of helichrysum oil, the participants had severe pain in the knee which was indicated by the pain scale. After the usage of oil for 15 days, there was not a significant reduction in pain. But after 30 days there was a lot of reduction in pain. As helichrysum oil has anti inflammatory properties, it showed a significant reduce in pain for arthritis and may also be used for treating arthritis.

#### INTRODUCTION:

The genus helichrysum belongs to Asteraceae and consists of hundreds of different species all around the world [1]. To obtain helichrysum oil, a hydro distillation method is used and to analyse this, the gas chromatography method

is used [2]. This oil is used as a traditional method to treat many diseases but in the scientific world it is still yet to be proved [3]. The flowers and leaves of this plant are mainly used to treat different diseases [3]. The antimicrobial activity and the chemical properties have been given but only limited information has been given on different extracts [2]. This oil has an antioxidant, antimalarial and also anti cancer properties but may have different allergic reactions on different people [4]. Arthritis is an inflammatory disease which in negligence can lead to joint destruction and other disabilities. Arthritis is common and has various stages [5]. There is no specific test for diagnosing arthritis. It can affect people of any age [6]. For preventing the chance of getting arthritis, we must exercise regularly, live an active life and also reducing weight can help too [5]. It is said that applying oil on the knee of a patient who has knee pain or general arthritis, helps reduce pain but it is yet to be studied deeply for its effect and various properties [7]. The most common type of arthritis are rheumatoid arthritis and osteoarthritis [8]. The symptoms may include: fatigue, loss of appetite, weakness, vague musculoskeletal pain [9]. Herbal remedies can also be used to treat arthritis for example marine oil supplements, n-3 fatty acids supplements, essential oil of ginger and aromatherapy [10].

The main aim of this study is to find the effect of helichrysum oil on an arthritic knee.

#### **MATERIALS AND METHODS:**

The study was conducted with a total of 15 participants with knee pain i.e. arthritis with a age of 30-40 years. This oil (after mixing with coconut oil) was given to the participants and they were asked to apply for a span of 30 days in the afternoon and before going to sleep. The pain was measured by using a pain scale. The responses were noted twice (on 15th and 30th day). The data was collected and analysed.

#### **PAIN SCALE:**

NO PAIN	MILD PAIN	MODERATE PAIN	SEVERE PAIN	VERY SEVERE PAIN
1	2	3	4	5

#### **RESULT AND DISCUSSION:**

From this study, it was shown that before the usage of helichrysum oil (0th day), the participants had severe pain in the knee which was indicated by the pain scale in FIG 01. After the usage of oil for 15 days, there was no significant reduction in pain. But after 30 days there was a lot of reduction in pain. This was all measured by giving a pain scale to the participants and asking them to measure their pain. And the pain measured was put together in a graph (FIG 02).

Yvonne C Lee used DMARD (Disease Modifying Anti Rheumatic Drugs]. But this study was not expressed properly [11]. Janet. L had used ginger's

essential oil in treating arthritis. It had a therapeutic effect as well as an additional protective effect on arthritis. It has no effect on in-vivo organs (such as bone or uterus) [12]. N. Abishek discussed various methods on preventing arthritis [13]. Joel M Kremer allowed patients to use n-3 fatty acid supplements under the guidance of a physician to treat arthritis [14]. Deborah used botanical lipids such as gammalinolenic acid for treating arthritis but more study is to be done on this [15]. Calder used different and combinations of dosages of fatty acids for treating rheumatoid arthritis [16]. Tyler Bahar showed Copaiba oil and the Deep blue blends well when using aroma hand technique [17]. Leslie. G discussed the proper and healthy diet for treating arthritis [18]. S Harst also added n-3 fatty acids in the diet of arthritic patients [19]. Zabotti A used ultrasound for diagnosis and helped manage rheumatoid arthritis. Positive predictions were seen [20].

In this research, helichrysum oil was used to treat arthritis which showed positive results. Other researches have been done in treating arthritis but none of those studies used helichrysum oil in their studies.

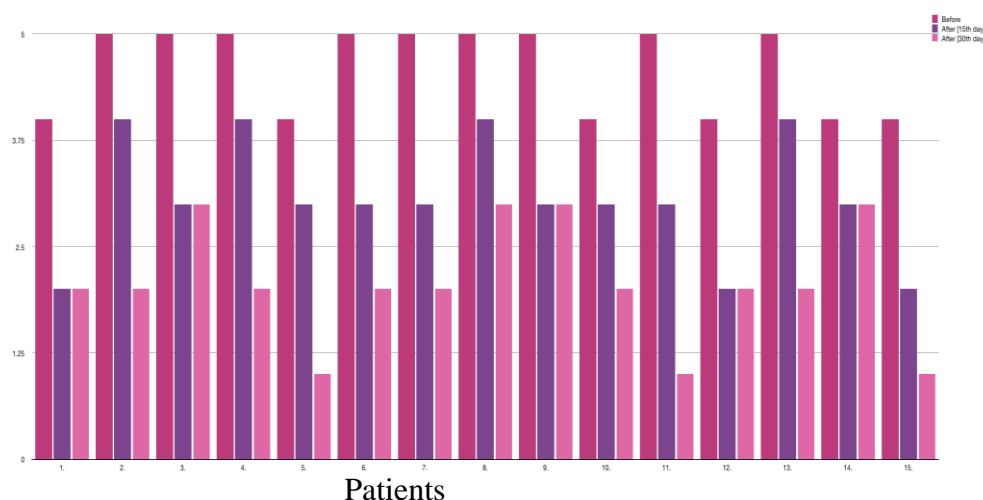


Figure 1: Compared to the pain of the 0th day, the pain had reduced a lot and the participants felt less pain nearing the 30th day.

### CONCLUSION:

**Helichrysum** oil has anti-inflammatory properties, which in turn showed a significant reduction in pain for arthritis. In future, helichrysum oil can also be used for treating arthritis after further studies

### ACKNOWLEDGMENT

We **thank** Saveetha Dental College for providing us the full support to conduct the study.

### CONFLICT OF INTEREST:

The **author** declares that there was no conflict of interest in the present study.

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