

ABSTRACT

EFFICACY OF MUDAKKU CHURANAM AND SIVAPPU KUKKIL OIL ON AZHAL KEELVAYU (OSTEOARTHRITIS OF THE KNEE JOINT)

This study is a Single Blind Comparative Clinical Trial to determine the internal administration of *MudakkuChuranam* and external application of *SivappuKukkil* Oil in the management of *AzhalKeelvayu* (Osteoarthritis of the knee joint). It also observed the side effects of *MudakkuChuranam* and *SivappuKukkil* Oil in the treatment of *AzhalKeelvayu* and determines the association of *AzhalKeelvayu* with hereditary, trauma, physical activity and types of food.

Hundred and fifty (150) clinically diagnosed *AzhalKeelvayu* patients were selected and systematically divided into two disease category (Unilateral and Bilateral *AzhalKeelvayu*) three treatment groups of 35 bilaterally affected patients and 15 unilaterally affected patients each during the period of July 2010 to July 2011 at Government Ayurvedic Hospital, Kaithady. Group I was treated with *MudakkuChuranam* internally, Group II with *SivappuKukkil* oil as an external application and Group III with *MudakkuChuranam* internally and *SivappuKukkil* oil as an external application. Clinical parameters (swelling, tenderness and restricted motion) were analyzed by score as difference between the visits on first day of the treatment, middle part of the treatment and end of the treatment.

Statically highly significant improvement ($p < 0.001$) in joint swelling, tenderness and range of motion were observed in all three groups on 20th day and 40th day, while mean reduction in Group III is highest indicating the synergistic effect of the drug with oil application.

10% of Patients in Group III had complete remission. However there was marked improvement in Group I (80%), II (70%) and III (84%). *MudakkuChuranam* is free from strict side effects.

Symptoms of *AzhalKeelvayu* increases with the intake of the followings;

Food such as (Long Beans 77.33%, Bread fruit 74%, Ash Plantain 68%, Pumpkin 62%, *Mothakavalli* 57.33% and Dhal 54%). Physical activities such as (running in 99.33%, walking over 250m, climbing steps and jumping 98% and 97.3% lifting of weight), worries 94.66%, exposure to cold 88.7% and during *Karkalam* (August-September) 60.66%.

Of the 150 sample patients, 46.66% had trauma in the knee joint (one or both) in past. Patient's mothers (33.3%), siblings (24.66%) and fathers (22.66%) had a history of *AzhalKeelvayu*.

In general it is hoped that the findings of this study would help in the global use of *MudakkuChuranam* and *SivappuKukkil* oil for the treatment of *AzhalKeelvayu*.