IJPMR 8-9, April 1997-98 *Short Paper*

Comparative Clinical Study of Indigenous Drug with Ibuprofen in Patients of Osteoarthritis

Dr. U. Singh, Dr. K. Kishore and Dr. S.D. Seth

Abstract

Clinical efficacy of an indigenous drug and Ibuprofenin eighty patients of osteoarthrities was studied. In both the groups of 40 patients each, the results showed that the mean pain intensity scores significantly lowered down at 2 weeks and 6 weeks time interval, compared to the pain at the initiation of therapy. Between the two groups, there was no statistically significant difference in their efficacy for reduction of pain. None of the patients in either group reported any side effects with medication.

Introduction

Osteoarthritis is also called osteoarthrosis or hypertrophic arthritis a form of degenerative joint disease which involves the joints of axial skeleton as well as the extermeties[1]. There is progressive loss of articular cartilage, bone proliferation, joint deformility and varying degree of instability leading to loss of function. The cause is not known and it affects articular cartilage of previously healthy joints (Primary)[2]. Secondary Osteoarthritis may occur early in life following abnormality in joint such as previous intraarticular fracture, due to repetitive strains as in high level sportsmen or strains in abnormal directions such as following fractures which have healed in an abnormal alignment[3]. The patients present with recurrent episodes of pain, effusion stiffness and progressive limitation of motion. There are several NSAIDs available to treat OA. The objective of the present study was to compare the efficacy and side effects of indigenous drug wth Ibuprofen in patients of Osteoarthritis.

Material and Methods

A total number of 80 patients (Age range 36-73 Years) with diagnosis of Osteoarthritis were selected from the outdoor patient department of Physical Medicine and Rehabilitation, AIIMS, New Delhi. All the patients enrolled in this study had their history recorded, General Physical Examination and detailed joint examilnation was done. All patients had their X-Ray of the Joint, hemogram, urine examination, blood sugar and serum uric acid levels done. All the patients were asked not to take any drug without informing us. After randomization in the two groups of 40 patients each were asked to take indigenous drug Rumalaya or Ibuprofen tablet (400 mg) at 8 hourly intervals after meals. All the patients were assessed for tenderness, swelling, stiffness, range of joint motion and for joint pain before drug therapy and after drug therapy at 2 weeks and at 6 weeks time interval. Patients with any other major illness were excluded from the study.

Results

The assessment of pain relief was done on a numerical scale (1-10) before starting drug therapy and at 2 weeks and 6 weeks after drug therapy. On statistical analysis (Two way analysis of Variance) of mean pain intensity scores the results show that indigenous drug and ibuprofen provided significant pain relief at 2 weeks ($P<0.001$) and 6 weeks time interval ($P<0.001$)

Address for corresspondence :
Dr. U. Singh, Dept. of Physical Medicine and Rehabiliation, AIIMS, Ansari Nagar, New Delhi-110029

when compared to pain of the initiation of therapy, at rest, on walking and squatting. On statistical analysis (t-test) between the two treatment groups no significant difference ($P>0.05$) was observed between the two drug at 2 weeks and at 6 weeks time interval. No significant change was observed in either group of patients in their swelling, stiffness and range of motion of joint. No patient reported any side effect with either medication.

Discussion

The results of this clinical study show that both the indigenous drug and Ibuprofen are effective in controlling pain at 2 weeks and 6 weeks time interval. Furthermore on comparison of pain relief (as judged by pain intensity scores) it was found that there was no significant difference between the two treatment groups. Hence both drugs are equally effective. But the indigeneous drug is cheap in cost compared to ibuprofen tablet. Thus, indigenous drug may be prescribed in patients as an alternative to Ibuprofen in patients suffering from Osteoarthriltis. In this study no patient reported any side effect. The non sterodial drugs are known to cause G-I toxicity including ulceration[4] and even major GI bleeding particularly in elderly patients. In our study no such side effect or toxicity was observed due to ibuprofen. Perhaps a larger sample would be necessary to find out the comparative toxicity and other un-toward effects.

References

1. Rendall J. Lewis. Degeneartive Arthritis in Orthopaedic Rehabiliation Ed. Vernon L Nickel Churchill Livingstone N.Y. Edinburg, London and Melbourne, 1982 pg 515-516.
2. Samuel L. Turek. Orthopaedics Principles and their Applications J.B. Lippincott Co. Philadephia, 1984 pg 384.
3. Boyd S. Goldie, Orthopaedics Diagnosis and Management. A guide to the care of orthopaedics patients. Blackwell Scientific publications, Oxford 1992, pg 20-24.
4. Weinblatt ME. Non-steroidal anti-inflammatory drug toxicity : increased risk in elderly, Scand. J. Rheumatol Suppl. 1991; pg 9-17.