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Comparison of Aceclofenac and combination (Aceclofenac + Thiocolchicoside) therapy in acute low back pain patients

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ABSTRACT:
A prospective observational assessment of pain severity for acute low back pain patients conducted over a period of 12 months in ESI hospital, ayanavaram. In this study, 200 patients with acute low back pain were included and out of this 100 patients were given Aceclofenac and remaining 100 were given combination (Aceclofenac + Thiocolchicoside) therapy and the patients were selected based on the inclusion and exclusion criteria. During the study period, 26 patients from group A and 21 patients from Group B did not come for follow-up. Out of 200 patients, 46.5% were males and 53.5% were females. The intensity of the pain relief was 8.3 on day 0, 6.5 on day 3 and 3.9 on day 7 for Aceclofenac and 8.1 on day 0, 5.5 on day 3 and 2.5 on day 7 for combination (Aceclofenac + Thiocolchicoside) therapy. Out of 153 patients, 21 of them had no change, 10 of them had poor, 27 of them had moderate 10 of them had good and 06 of them had excellent efficacy for Aceclofenac therapy and 05 of them had no change, 09 of them had poor, 32 of them had moderate, 23 of them had good and 10 of them had excellent efficacy on combination (Aceclofenac + Thiocolchicoside) therapy. In this study we found that decrease in severity of pain at discharge assessed by VAS was more pronounced within patients receiving Aceclofenac + Thiocolchicoside as compared to patients receiving Aceclofenac therapy.

KEYWORDS: Pain, Aceclofenac, Thiocolchicoside, Low back pain, Therapy.

INTRODUCTION:

Low back pain is one of the common presenting complaints in general, orthopedic and spine outpatient centers. Its prevalence ranges from 8% to 37% with peak prevalence between 45 to 60 years. [1][2]About 80 percent of adults experience low back pain at some point in their lifetimes. Men and women are equally affected by low back pain, which can range in intensity from a dull, constant ache to a sudden, sharp sensation that leaves the person incapacitated. Pain can begin abruptly as a result of an accident or by lifting something heavy,

or it can develop over time due to age-related changes of the spine.[3]Aceclofenac relieves pain and inflammation through a variety of mechanisms and in addition exerts stimulatory effects on cartilage matrix synthesis. The anti-inflammatory effects of Aceclofenac have been shown in both acute and chronic inflammation. It inhibits various mediators of pain and inflammation including:It directly blocks the PGE2 production at the site of inflammation by inhibiting preferentially COX-2 and COX-1 activity.[4]Thiocolchicoside is a muscle-relaxant(skeletal) agent used for the treatment of orthopedic, traumatic and rheumatologic disorders.Anti-inflammatory and Analgesic properties. Thiocolchicoside acts both in contractures of central origin and in those of reflex type, rheumatic and traumatic.[5]A Visual Analogue Scale (VAS) is a measurement instrument that tries to measure a characteristic or attitude that is believed to range across a continuum of values and cannot easily be directly measured. The VAS score is determined by m f the line to the point that the patient marks.[6]The objective of the study ombination (Aceclofenac + Thiocolchicoside) therapy in acute low back pai

MATERIALS AND METHODS:

It is a prospective observational study conducted from July 2015 to April 2016 on patients under inclusion criteria after getting approval from Institutional Ethics Committee. A total of 200 patients were included in this study. Population comprises of 100 patients who were taking Aceclofenac 100mg (Group A) and patients who were taking Aceclofenac 100mg and Thiocolchicoside 4mg (Group B). Written consent of patients was taken on informed consent for min the local language.

INCLUSION CRITERIA:

- Acute low back pain patients who are attended OPD and IPD of Orthopedic department.
- Patients who are willing to participate in study.

EXCLUSION CRITERIA:

- Patients with history of epilepsy.
- Patients with severe gastrointestinal disorders.
- Patients with cognitive deficit.
- Pregnant and Nursing women.

PROCEDURE:

Demographic data and relevant medical historywasobtainedfromallpatientspriortoinitiationoftherapy.100 patients were randomly selected and were prescribed with Aceclofenac 100 mg alongwithThiocolchicoside4mgtwiceday.100 patients were randomly selected and were prescribed with Aceclofenac alone in a dose of 100 mg twice a day. Patients' data were collected and assessed pain severity using Visual analogue scale after 3 days and 7 days of hospital visit after the initial visit.

STATISTICS:

Results were expressed as mean ± standard deviation. Documented data is entered into Microsoft excel 10.

- Within the group, variables were compared with paired *t*-test.
- Between the groups, variables were compared with independent *t*-test.

Statisticalsignificancewastakenatthe95%level($P<0.05$).

RESULTS:

Demographics details like age, gender distribution are depicted in figure 1, 2 and intensity of pain relief using Visual analogue scale is depicted in figure 3.

Comparison of severity of pain assessed by VAS: Score of pain at admission assessed by VAS decreased significantly as compared to baseline score within both groups i.e., group of patients receiving Aceclofenac + Thiocolchicoside and patients receiving Aceclofenac alone. However decrease in severity of pain at discharge assessed by VAS was more pronounced within patients receiving Aceclofenac + Thiocolchicoside as compared to patients receiving Aceclofenac therapy.

In this study, 200 patients with acute low back pain were included and out of this 100 patients were given Aceclofenac and remaining 100 were given combination (Aceclofenac + Thiocolchicoside) therapy and the patients were selected based on the inclusion and exclusion criteria. During the study period, 26 patients from group A and 21 patients from Group B did not come for follow-up, so data of these 47 patients were not included in the statistical analysis. Out of 200 patients, 93 (46.5%) were males and 107 (53.5%) were females. Among the study population of 200, 91 patients were in the age group 18 – 30 years, 73 patients were in the age group 31-49 years, 25 patients were in the group 50-69 years and 11 were in the group above 70. The intensity of the pain relief was 8.3 on day 0, 6.5 on day 3 and 3.9 on day 7 for Aceclofenac and 8.1 on day 0, 5.5 on day 3 and 2.5 on day 7 for combination (Aceclofenac + Thiocolchicoside) therapy. Out of 153 patients, 21 of them had no change, 10 of them had poor, 27 of them had moderate 10 of them had good and 06 of them had excellent efficacy for Aceclofenac therapy and 05 of them had no change, 09 of them had poor, 32 of them had moderate, 23 of them had good and 10 of them had excellent efficacy on combination (Aceclofenac + Thiocolchicoside) therapy. Score of pain at admission assessed by VAS decreased significantly as compared to baseline score within both groups i.e., group of patients receiving Aceclofenac + Thiocolchicoside and patients receiving Aceclofenac alone. However decrease in severity of pain at discharge assessed by VAS was more pronounced within patients receiving Aceclofenac + Thiocolchicoside as compared to patients receiving Aceclofenac therapy. Among 200 patients, 117 (58.5%) of them were doing physical exercises along with medications and 83(41.5%) of them were taking drugs alone. Decrease in pain severity was pronounced to be more in management with medications with physical exercises than medications alone.

Table1:Efficacy assessment of Aceclofenac and Aceclofenac + Thiocolchicos

Severity of pain based on VAS							
Aceclofenac group				**A**			
Mean scores of pain for 74 patients		Difference in mean scores at admission and at discharge	P value	Mean scores of pain for 79 patients		Difference in mean scores at admission and at discharge	P value
During admission	At discharge			During admission	At discharge		
5.35	1.15	4.2	<0.05	5.45	0.67	4.78	<0.05

FIGURES:

FIGURE: 1

FIGURE: 2

FIGURE: 3

CONCLUSION:

From the current study, it was concluded that combination therapy (Aceclofenac + Thiocolchicoside) was found to be more effective than Aceclofenac alone. But there are some cases of reoccurrence of low back pain when they are taking medications alone. Combination (Aceclofenac + Thiocolchicoside) therapy along with physiotherapy like IFT (Inter ferential therapy) was found to be more effective for patients with acute low back pain. Hence combination (Aceclofenac + Thiocolchicoside) therapy along with Physiotherapy can be considered as first line treatment for patients with acute low back pain. Further studies are needed to support the data for treating acute low back pain which converts into chronic low back pain.

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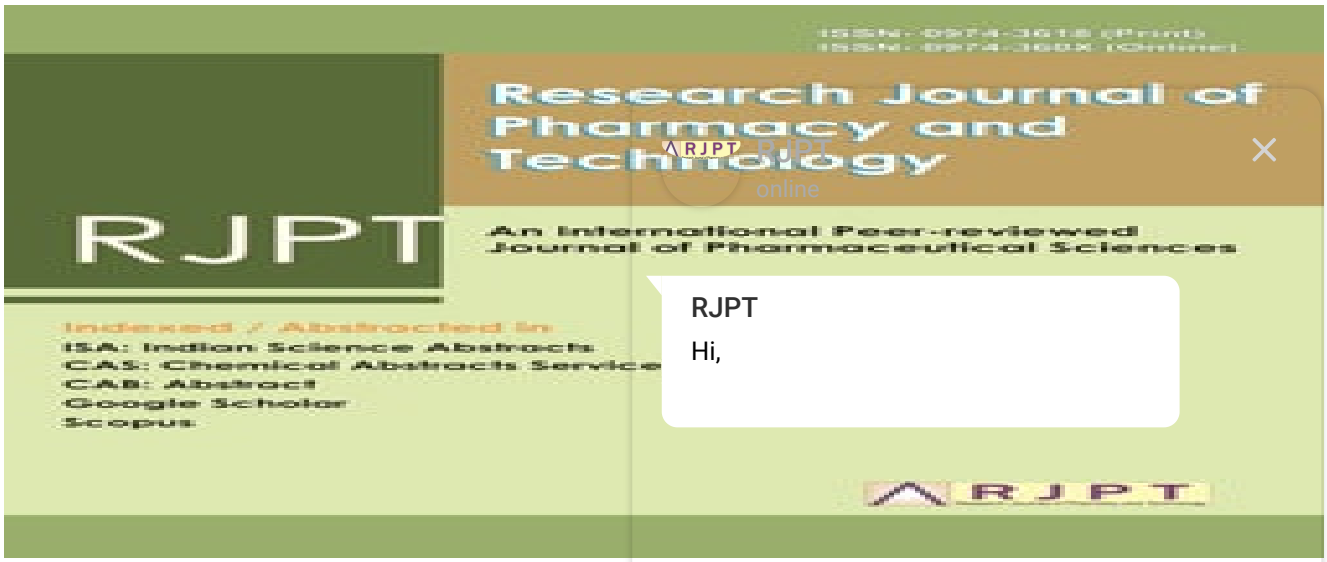

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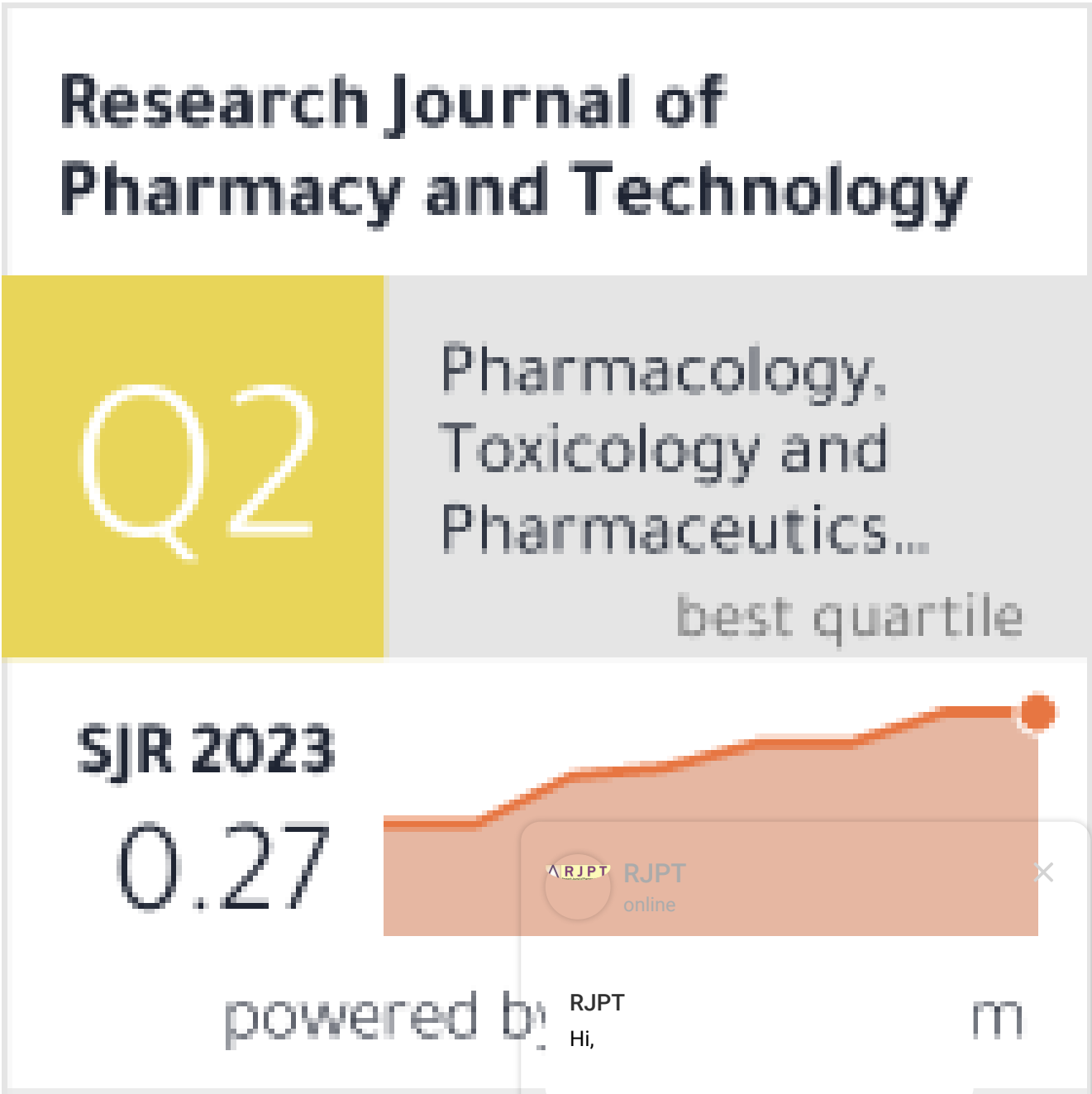

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