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# A STUDY OF RENAL FUNCTION OF A SAMPLE OF PATIENTS ON LONG –TERM DICLOFENAC SODIUM FOR RHEUMATOID ARTHRITIS

A PROJECT REPORT PRESENTED

BY

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### **ABSTRACT**

A study of renal function of a sample of patients on long-term diclofenac sodium for rheumatoid arthritis

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Rheumatoid arthritis is the commonest form of chronic inflammatory joint disease. It occurs throughout the world in all ethnic groups. As such, it is an important setting for the design of anti-inflammatory therapies and their evaluation. NSAIDs are one of the most valuable groups of available medications because of their effectiveness in relieving pain, particularly that associated with rheumatoid arthritis. However, there are conflicting views on whether NSAIDs are associated with adverse renal effects.

This study was intended to identify the risk of renal impairment, if any, by means of measuring the urinary albumin index, due to long-term diclofenac sodium among the patients with different arthritides including RA.

A total of one hundred and twenty five patients with different types of underlying rheumatological disorders and different drug combinations (diclofenac sodium alone and diclofenac sodium with different DMARDs) were selected. Data were analyzed using one-way ANOVA, under different basic and clinical characteristics, with the help of computer software 10.0 SPSS system. The results suggest that the risk of renal impairment is greater among the elderly patients, over 60 years of age and the daily usage of diclofenac sodium over the period of >2 years at dosages 50 mg tds is more likely to

affect the renal function. Further that the RA itself does not affect renal function significantly. In conclusion, diclofenac sodium is a relatively safe drug even in higher doses in the first year of combination treatment. But appropriate clinical use of all NSAIDs, including diclofenac sodium, requires careful consideration of risk factors that predispose the patients to nephrotoxicity. Therefore careful monitoring with dose adjustments is necessary in patients at risk.