INTRODUCTION AND AIM OF THE WORK

Rheumatism is one of the oldest group of diseases known to man. Millions of the human populations suffer now adays from this disease; this puts a great burden on the economics of the world **(Aviado, 1972).**

Anti-inflammatory drugs are usually prescribed for rheumatic diseases **(Craig and Stitzel, 1986).** The widely used drugs by physicians in treating rheumatism are non-steroidal anti-Inflammatory drugs (NSAIDs) which perform this action through their effect on Prostaglandins (PG) synthesis **(Craig and Stitzel, 1986).**

Cytogenetic studies on NSAIDs indicated that their effect on chromosomal aberration was controversial. Most NSAIDs did not induce any aberrations **(Rathenberg and Muller (1972), Walker *et al.*, (1975), Smith *et al.*, (1979), Kullich and Klein (1986))**.

Some authors reported that NSAIDs increase ejaculate volume and sperm motility **(Loscher *et al.*, 1988)**, they exert their effect on spermeation through inhibition of PG synthesis **(Craig and Stitzel, 1986).**

The effects of lornoxicam concentration on its therapeutic and toxicological properties have not yet been extensively reported **(Skjodt and Davies, 1998).**

The aim of this study is to investigate the effect of different doses of a NSAID (Lornoxicam) for a different period of time (12h, 24h, 48h, and 5 days) to study its effect on the chromosomes and sperm head abonormality using classical methods of cytogenetics.