# INTRODUCTION

A remarkable progress in the technology of intrauterine contraception had taken place in the last twenty years. Research activities in this direction were stimulated by reports that the adminstration of contraceptive steroids were associated with some of serious systemic compolications.

Much attension was given to explain the way by which these devices prevent conception. Among theories put forward to explain the mechanism of the intrauterine contraceptive device (IUCD) action are: A chemical and mechanical barrier preventing conception implantation (Oster, 1972), effect of copper ion on ovum transport (Nutting and Muller, 1975), and induction of a local tissue "chemotactic" response, which interferes with proper nidation (EL-Sahwi and Moyer, 1971), where the IUCD acts as a foreign body, evoking a sterile inflammatory response which is reflected systemically by three fold increase in monocytes, eosinophilic, polymorphonuclear and lymphocytic leucocytes in the peripheral blood (Sagiroglu and Sagiroglu, 1970).

Holub et al. (1971), Gump et al. (1973), and Chandra et al. (1974), showed that the IUCD was capable of inducing alternation in immunoglobulin levels in the serum. Their data showed an increase in serum levels of IgG and IgM.

Connell and Connell (1971), found that the number of IUCD users, in whose sera C-reactive protein (CRP)

was found, increased with the length of the device use. By three years of use, CRP was present in the sera of 41% of users.

Mountrose et al. (1975), found that none of the sera examined at the time of IUCD insertion and 4 weeks after insertion contained any significant amount of CRP.

Tatra et al. (1978), noted that no significant rise in acute-phase proteins was noted during the first month after IUCD insertion.

No significant alternation was noted in the erythrocyte sedimentation rate in women using Cu 7 devices or Lippes loops at the time of insertion,1 week, and every 3 months for 1 year after insertion (Charles, 1974).

In view of the forementioned informations, we embarked on a study to investigate the relation of 3 non specific inflammatory parameters namely, erythrocyte sedimentation rate, C-reactive protein and seromucoid, in women using IUCD as a contraceptive method.