INTRODUCTION & AIM OF THE WORK

Systemic lupus erythematosus (SLE) is a chronic complex autoimmune disease with broad range of manifestations (Mills, 1996) of unknown etiology, the course of disease is difficult to predict and marked by active phases and remissions (Apple and Valeri, 1994).

Renal involvement is one of the major severe complication of SLE. On the basis of clinical data, the reported frequency of renal involvement varies between about 35% and 90% of cases (Balow and Austin 1991 & 1992). But some investigators reported that the incidence of renal involvement approaches 90% if light microscopic evaluation of renal biopsy or autopsy material is performed (Cameron, 1993). Moreover nearly all patients with SLE have some renal abnormalities when the more sophisticated techniques of immunofluorescence and electron microscopy are included in the examination of biopsy materials (Kashgarian, 1994) and about 15-20 % of these patients passed to end stage renal disease (Nossent et al., 1991).

The complete picture of the genesis and behavior of lupus nephritis is still disputed and there are no clear indices for using of cytotoxic drug especially cyclophosphamide in lupus nephritis (Imai et al., 1994). It has been painfully discovered that several variables should be controlled in order to achieve prolonged stable renal function and survival, many of these variables are difficult to modify, so intensive efforts and trials referred to several comprehensive treatises, but the optimal therapeutic models still disputed (Balow and Austin, 1991 &1992).

The recent interest in the use of intravenous cyclophosphamide therapy (I.V-Cy) in patients with severe lupus nephritis has prompted researchers to investigate the determinants of response to that treatment. In earlier studies, Austin and his colleagues (1986) have demonstrated the superiority of IV-CY. over other treatment modalities in patients with severe proliferative glomerulonephritis.

Decher et al., (1979) determined the activity index (AI) and chronicity index (CI) from renal biopsies of large group of SLE patients with broad

spectrum of glomerular pathology and the patients with the highest total pathology score (AI+CI) had the most profound depression of renal function both at the time of biopsy and after two years of follow up. Austin et al., (1983 & 1984 & 1994) demonstrated that semiquantitative histological indices of acute and chronic renal pathology are better predictors of outcome in SLE glomerulonephritis than WHO classification of lupus glomerulonephritis, also some investigators restricted to biopsies showing that most widely distributed inflammatory lesions (diffuse proliferative and membranoproliferative glomerulo-nephritis) the patients who developed renal failure had a higher AI and / or CI in their initial biopsies compared to the group that did not develop renal failure (Austin et al., 1994). On the ather hand , Schwartez et al., (1993) reported that all used (AI & CI) which depend on the histological finding of the kidney biopsies are of limited sensitivity and specificity for prediction of the outcome.

So, this study aim to identify the clinical, laboratory and histopathologic characteristics of severe proliferative types of lupus nephritis, which may predict the response of patients with lupus nephritis to (IV-CY) therapy.