

Study of Some Physiological and Biochemical Markers of Lupus Nephritis and the Relationship with Some Bacterial Isolates.

- **Author(s):** Asma'a H. Mohamed
- **Abstract:** In this study, the percentages of study variables including age, gender, residence, family history between study groups including patients with Lupus nephritis disease and control group were studied. The results showed presence of significant differences between study groups in age ($P = 0.05$), gender ($P = 0.05$) and family history ($P = 0.05$), while no significant differences between study groups in residence ($P > 0.05$). The mean differences of RBC count, WBC count, Hb and Platelet count between study groups were significant decrease ($P = 0.05$) in RBC count, WBC count, Hb and Platelet in Lupus nephritis compared with control group. In addition, the mean differences of serum total protein, Serum monocyte chemoattractant protein-1 and erythrocyte sedimentation rate between study groups were significant increase ($P < 0.001$) STP, SMCP-1 and ESR in Lupus nephritis compared with control group. However, All 100 urine samples were inoculated for isolated pathogenic bacteria by identification these bacteria by gram stain and biochemical test, 95(95%) were positive culture, whereas 5(5%) samples showed no bacterial growth, from this results, it was shown that and E. coli were considered the predominant an etiological agents to other types bacteria which constitute 55/95 (57.89%), and Salmonella enterica constitute 29/95 (26.31%) from the total isolates. DNA was extracted from all suspected isolates that previously identified as E. coli and Salmonella enterica by biochemical tests, conventional PCR was carried out using these DNA samples for the amplification of specific gene for E. coli and Salmonella enterica primers; according to the sequences and program. After that gel electrophoresis showed that, all of 55(100%) samples of E. coli by the specific produced 221 bp DNA fragment when compared with allelic ladder, and all of 29(100%) samples of Salmonella enterica by the specific produced 917 bp DNA fragment when compared with allelic ladder.
- **Keywords:** Study groups, Protein, Bacterial growth, DNA