**The Correlation of FGF23 Level with Parathyroid Hormone Level at Different Stage of Chronic Kidney Disease**

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| **Abstract** The aim of current study was determining the levels of FGF-23 in patients at different stage of hronic kidney disease, and found the correlation between FGF23 level and some electrolytes and PTH hormone. The current study is a case (patient chronic renal failure) - control (healthy persons) study Chronic renal disease patients of both genders (65 males and 44 females) aged 20 to 71 years’ old who visit Azadi Teaching Hospital and Al-jumhuri Hospital in Kirkuk, Iraq (from October to December 2020), are the target population. Per patient with end-stage renal disease received hemodialysis twice or three times a week for a total of four hours. The results of the current study demonstrated that the highest age group with renal failure was 51-60 years, where it was 26.2%. Then, the age group was 61-70, as it was 22.1%, while the lowest age group of patients of renal failure was 31-40, where it was 5.4%. The results of the current study showed that the percentage of healthy people in the current study was 40 (26.8%), while the number of patients with kidney failure was 83 (55.7%), while other stages of kidney disease were reported, the third stage included 9 (6%) patients while. The fourth stage included 17 (11.4%) patients. Calcium levels in CDK (male and female) patients showed significant (P≤0.05) decrease compare with control group. Phosphorus, FGF-23 and PTH levels in CDK (male and female) patients were showed significant (P≤0.05) increase compare with control group. |
| Keywords: Fibroblast growth factor 23, Chronic kidney disease, Hyperphosphatemia. |

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