

Correlation between some of the renal failure parameters and the abnormalities of iron levels in the blood of patients with renal failure

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Renal failure (RF) is a medical condition in which the kidneys are failed to operate correctly. This study aimed to investigate the relationship between RF and anemia through measuring the levels of transferrin, hepcidin, ferritin, iron, and total iron binding capacity in RF patients. The study has included 100 patients with RF disease and controlled with 50 healthy people with matched ages compared to the patients. Urea and creatinine levels were extremely elevated in RF patients compared to control. The levels of ferritin and hepcidin were increased significantly in RF patients compared to the control. Transferrin level on the other hand was not changed significantly in RF patients compared to control. The levels of iron and total iron binding capacity were reduced significantly in RF patients compared to control. Moreover, hemoglobin level was reduced significantly in RF patients compared to control. In conclusion, RF can lead to the incidence of anemia in patients and should be monitored carefully to avoid the health consequences. Also, the high level of hepcidin indicated serious inflammatory events in RF patients.

KEY WORDS;Urea, Creatinine, Renal failure, Ferritin, Fe

RESOURCE LIST:

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