

## **DEDICATION**

***I dedicate this work to my  
parents and the whole family***

## **Abstract**

Seventy five chronic renal failure under dialysis were subjected to biochemical investigation in order to assess the development of anemia in these patients, and to highlight the major factors which may be believed to cause anemia in CRF patients who undergo renal dialysis.

The preliminary investigation related that about 35% CRF patients were diabetic hypertensives.

The result also showed that the CRF patients who undergo renal dialysis maintained really normal iron concentration.

The result also related that the majority of CRF patients presented with normocytic normochromic anemia. Erythropoietin (Epo) the glycoprotein hormone synthesized in the kidney and other factors may be implicated in causing anemia in CRF. The implication of Epoetin beta, the recombinant form of erythropoietin in treatment of anemia associated with CRF was discussed.

## ملخص الدراسة

تم اختيار 75 مريضاً بالفشل الكلوي في مركز غسيل الكلى بمستشفى الخرطوم التعليمي ويتعالجون بدورات من غسيل الكلى للاشتراك في هذه الدراسة وكذلك تعرض هؤلاء المرضى لإصابة بالأنيميا نتيجة لإصابتهم بالفشل الكلوي. أوضحت الدراسة أن حوالي 35% من مرضى الفشل الكلوي يعانون أيضاً من مرض السكري وارتفاع ضغط الدم.

كما أوضحت الدراسة ارتفاع تركيز اليوريا أي معدل 8 أمثال القيمة السوية عن مرضى الفشل الكلوي مقارنة بالمجموعة الضابطة (كنترول). وأوضحت الدراسة أيضاً أن تركيز الحديد في الأشخاص الأصحاء.

أوضحت الدراسة أيضاً إصابة غالبية مرضى الفشل الكلوي بالانيميا ، والتي ربما يكون هرمون الـ Erythropoietin والذي يتم تصنيعه وإفرازه من الكلى أحد أهم العوامل التي تؤدي إلى ظهور حالات الأنيميا عند مرضى الفشل الكلوي.

• تطرقت الدراسة أيضاً إلى مناقشة إلى الـ Epoitinbeta وهو الهرمون المسؤول عن تصنيع هرمون Erythropoietin في الكلى من علاج حالات الانيميا عند مرضى الفشل الكلوي.

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