



Sudan University for sciences and Technology



College of Graduate Studies

**Serum Creatinine, Uric Acid, Uric Acid to Creatinine Ratio
and Glomerular Filtration Rate among Metabolic Syndrome
Patients in Khartoum State**

الكرياتينين، حمض اليورك، نسبة حمض اليورك إلى الكرياتينين و معدل تصفية
الكبيبة في مصل مرضى المتلازمة الأيضية في ولاية الخرطوم

A dissertation submitted in partial fulfilment for the requirement of the master degree in
Medical Laboratory Science (Clinical Chemistry).

By:

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*Introduction, Rationale, and
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Questionnaire
No. ()

Research title: Serum Creatinine, Uric Acid, Uric Acid to Creatinine Ratio and Glomerular Filtration Rate among Metabolic Syndrome Patients in Khartoum State.

Name:..... **Age:**..... **Status:**.....

Gender:

Male

Female

Height: cm

Weight: Kg

waist circumference cm

Results:

1- Serum creatinine:.....mg/dl

2- Serum uric acid:.....mg/dl

3- Serum uric acid to creatinine ratio:.....

4- Estimated glomerular filtration rate:

$$\text{CKD-EPI Creatinine} = A \times (\text{Scr}/B)^C \times 0.993^{\text{age}} \times 1.159$$

Where A, B, and C are the following:

| Female | | Male | |
|--------------------|------------|--------------------|------------|
| Scr ≤0.7 | A = 144 | Scr ≤0.9 | A = 141 |
| | B = 0.7 | | B = 0.9 |
| | C = -0.329 | | C = -0.411 |
| Scr >0.7 | A = 144 | Scr >0.9 | A = 141 |
| | B = 0.7 | | B = 0.9 |
| | C = -1.209 | | C = -1.209 |

.....ml/min/1.73m²

Date: / /2018