

**Ministry of Higher Education
And Scientific Research
Al-Muthanna University
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**BIOCHEMICAL STUDY IN THE BLOOD OF PATIENTS WITH
URINARY TRACT STONE**

To the Council of College of Sciences University of Al-Muthanna as aPartial fulfillment of the requirements for the degree of Master Science in Biology/Zoology

A thesis By

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SUMMARY

This study has been made on the number of the patient suffering from renal stone ,(25 health,50 patient) taken from Hussien Hospital education with important information on patient are documentede the investigation included:

1-Biochamical study included the level of trace element ,Blood Urea,Creatinin,Uric Acid,Calcium ion,potassium ions stage age (1-70) years

-The results show increase significantly in the urea concentration for male patient with renal stone ,mean of male patient $\mu\text{mol}\backslash\text{L}$ (6.5 ± 2.24) compare with mean of female. $\mu\text{mol}\backslash\text{L}$ (4.3 ± 1.29).

-The results show increase significantly in the uric Acid concentration for male patient with renal stone ,mean of male patient $\mu\text{mol}\backslash\text{L}$ (99.60 ± 330.35) compare with mean of female(65.62 ± 206.0) $\mu\text{mol}\backslash\text{L}$

-The results show increase significantly in the Ca^{+2} concentration for male patient with renal stone ,mean of male patient $\mu\text{mol}\backslash\text{L}$ (9.61 ± 1.26) compare with mean of femal $\mu\text{mol}\backslash\text{L}$ (8.88 ± 0.79).

-The results show increase significantly in the Creatinine concentration for male patient with renal stone ,mean of male patient $\mu\text{mol}\backslash\text{L}$ (22.17 ± 83.36) compare with mean of female $\mu\text{mol}\backslash\text{L}$ (11.57 ± 65.15).

2-Hormone study included the level of Progesterone,Estradiol,Testesterone, parathyroid age from(1-70).

- The results show increase significantly in the Progesterone concentration for patient with renal stone ,mean of patient $\text{ng}\backslash\text{mI}$ (1.04 ± 1.46) compare with mean of healthy $\text{ng}\backslash\text{mI}$ (0.41 ± 0.48)

- The results show increase significantly in the Parathyroid concentration for patient with renal stone ,mean of patient (11.39 ± 19.31) $\text{Pg}\backslash\text{m}$ compare with mean of healthy $\text{pg}\backslash\text{m}$ (27.08 ± 11.39).

3- It had been noticed that by chemical analysis of stones collected from patient after surgery that calcium oxalate represented the greatest percentage in male coax stone while the greatest percentage in female uric acid stone.

