# **Dedication**

To those who gave me every part of their lives......

My Father and

Mother.

# **Acknowledgements**

'm deeply grateful to my supervisor Dr: Hussain Gad Elkarim Ahmed, assistant professor, College of Medical Laboratory Sciences. University of Khartoum, for his guidance, encouragement and support.
- My thanks also go to Mr. Mohammed Hassan Elhoiaress for his assistance.

### **Abstract**

This is case/ control study carried out in Madani Town during the period from March 2005 to July 2005. The study assessed the cytological pattern in urine of patients with renal failure. Using conventional cytological stains Papanicolaou and May Grun Wald Giemsa stains. In this study 60 sample were collected. Of the 60 specimens, 50 were collected from patients with renal failure and the remaining 10 were from apparently healthy individual as controls. Examination of cytological smears revealed no cytological atypia were detected, inflammatory cell in all cases and among 4(40%) of controls.

Furthermore, different infectious condition were detected. Twenty three(38.3%) of bacterial infections were detected among cases, hence only 3(5%) were found among controls. Furthermore trichomonas were detected in 3(5%) of the cases.

Concerning the comparison of the staining quality of Pap. And MGG. MGG resulted in 57(95%) fair quality compared to Pap. which disclosed 54(90%) fair quality.

These findings suggest that urine cytology is important for monitoring different infectious condition that affect renal failure patients. MGG is best applied for urine cytology, as inflammatory cells are predominating such specimens.

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