

**ORAL MANIFESTATIONS AND ANALYSIS OF BLOOD AND
SALIVARY UREA LEVELS OF PATIENTS UNDERGOING
HEMODIALYSIS AND KIDNEY TRANSPLANT**

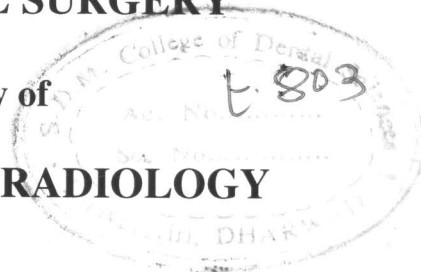


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ABSTRACT

Aims and Objectives: To evaluate the oral manifestations in patients with Renal diseases. To correlate the blood and salivary urea levels in patients under going Hemodialysis and Kidney Transplant and to prove that salivary urea levels are slightly higher than blood urea levels in renal disease patients. To conclude that analysis of salivary urea can be used as non invasive diagnostic tool in renal diseases.

Materials and Methods: Subjects were selected from patients undergoing hemodialysis and patients who had underwent kidney transplantation at Ashwini Hospitals Guntur The total number of subjects were 45, divided into a study group and a control group .The study group is subdivided into Hemodialysis group (HD)with 25 patients and Transplant (T) group with 15 patients .

All the patients in the study groups were diagnosed with renal diseases like acute renal failure, chronic renal failure, acute nephrotic syndrome, glomerulonephritis etc. Hemodialysis group consists of patients bearing the disease for the past 1-5 years and undergoing hemodialysis once in a week for a period of 2 to 4 hours .In Transplantation group all the patients had undergone renal transplation with in the past one- year.

Subjects of control group (C) were free from systemic disease and they were not under any medication for the past one year.

Adequate history was recorded from all groups. All the groups were examined extra orally and intra orally using mouth mirror and probe under adequate illumination and findings were recorded.

Venous blood was collected from all the groups taken for the study from the antecubital fossa in patients with renal disease undergoing dialysis, and also in apparently healthy individuals .Blood was collected just prior to the dialysis .Renal transplant patients blood sample were collected during their review visit .

Unstimulated saliva was collected between 9 to 11 am from all the three groups .All the individuals were asked to spit into sterile plastic containers .

All the patients were asked not to take any food or hot beverages. If the collected sample contained any blood or sputum that sample was discarded and a fresh sample was collected The collected samples were submitted to the laboratory immediately for analysis of urea and nitrogen by an Automated Bio analyzer company named ERBA.

RESULTS: Results revealed that there was correlation existing between blood urea and salivary urea levels and salivary urea levels are slightly higher than blood urea levels in all the study groups . sensitivity of blood urea and salivary urea between hemodialysis and control group is 95% and 100% .

CONCLUSION : Our study leads us to the conclusion that salivary urea tests can be used in place of blood tests as a non invasive diagnostic tool thus preventing the un necessary and periodic with draws of blood which