

Abstracts of Papers Presented at NANCOF 2007

PATIENTS FOR RENAL REPLACEMENT THERAPY: WHY DO THEY PRESENT LATE?

Bosan, IB

*Nephrology Unit, Department of Medicine, Ahmadu Bello University Teaching Hospital, Zaria,
Kaduna State, Nigeria*

Background: A patient with progressive renal failure is referred late when management could have been improved by earlier contact with renal care services. Late referral is often defined as presenting to Nephrologists less than three months to the start of dialysis.

The objective of this study was to find out the factors responsible for the presentation in our patients.

Methods: The medical history of the individual patients and the referral letters were studied for possible reasons for late referral. Also simple direct questioning of the patients was done and the type of renal disease taken into consideration.

Results: 100 subjects were analyzed, 5% had either irreversible acute renal failure or superimposed acute on chronic renal failure. 95% had stage 5 chronic renal failure generally unaware of the condition before the referral. 50% of these had been on treatment for systemic hypertension, 20% for diabetes mellitus and 20% had past history of urinary symptoms but had been symptom free for long, 15% had a history of cardiovascular conditions. Access to health facilities was difficult for those in the rural areas and the poor in the urban suburbs. Screening for CKD was seldom done in the primary and secondary care centers. Other factors identified included cultural and religious factors, myths, the lack of understanding of the condition, fear of the unknown and outright denial of the progressive nature of the disease. Primary care physicians perceived Nephrologists as only concerned about the technicalities of dialysis, some lacked adequate experience and some were afraid of losing clinical responsibility. There were some delayed or missed appointments with the Nephrologists, poor doctor/patient or relatives' intervention.

Conclusion: Late referral of patients for renal replacement therapy in ABUTH, Kaduna State is caused by several factors which could be disease related, patient related, physician related and health system related. While some disease related factors seem unavoidable, most other factors could be improved upon. Screening of patients, especially those with high risk, for early diagnosis of chronic kidney disease, improved medical education and communication, multidisciplinary team approach and shared care between the primary care physician and the Nephrologists are all recommended.

THE CHALLENGES OF RENAL DIALYSIS IN ABUTH

Bosan IB and Ibrahim A

Nephrology Unit, Department of Medicine, A.B.U.T.H. Zaria

Background: The objective of this paper was to evaluate dialysis service during the first one year, establish the extent to which clinical outcome of those with renal failure in our environment has been improved and the challenges encountered. The records of all patients referred to the nephrologists for dialysis during the one year of service were analyzed. The outcome of every patient was considered and the factors that affected the outcome.

Results: One hundred and twenty-four (124) patients were referred for dialysis. 8(7%) had acute renal failure from acute gastrointestinal fluid loss, sepsis or severe acute blood loss, 4 of these could not get to dialysis while the other 4 had salvage dialysis with very good outcome. 116 (93%) had chronic renal failure all presenting with anaemia and 95% with abnormal calcium and phosphate metabolism. There was cardiovascular morbidity in about 50%. The aetiology of chronic renal failure was attributed to hypertension in 40%, chronic glomerulonephritis in 33% and Diabetes in 20%. Only 3 patients presented with stage 4 chronic renal diseases, and had opportunity to plan for their treatment. 68 patients (60%) could not afford to start dialysis due to lack of financial support. 45 patients started the procedure as emergency with temporary vascular access, 5 died during the first week in hospital. 28 (60%) of those who started dialysis dropped out of the programme during the first three months mainly because they lacked adequate financial support to continue. Only 7 (15%) of those who started dialysis have dialyzed for up to one year, 4 of these are still doing very well while the other 3 have reduced frequency of treatment with resultant increased morbidity. Only 3 patients have been referred out for transplant.

Conclusion: Hypertension, chronic glomerulonephritis and diabetes are the three leading causes of chronic renal failure in our environment. Late referral of patients to the nephrologists with the attendant high prevalence of co morbidity and uraemic complications is a major challenge. Poverty is a serious impediment to the expected improved outcome from dialysis in our environment. It is therefore necessary to emphasize prevention, early detection and management of the early stages of chronic kidney disease in our environment.

PAEDIATRIC RENAL PRESENTATION AT THE OLABISI ONABANJO UNIVERSITY TEACHING HOSPITAL, SAGAMU: ONE YEAR REVIEW

Adekanmbi AF, Alebiosu CO** Ogunlesi TA* and Olarewaju DM**

**Department of Paeditrics and **Department of Medicine, Olabisi Onabanjo University Teaching Hospital, Sagamu*

Background: The study aimed at describing the pattern of renal disorders in children presenting at the Olabisi Onabanjo University Teaching Hospital, Sagamu.

Methods: Consecutive post-neonatal patients with renal dysfunction were recruited into the study over a one year period between January and December 2006. Demographic and laboratory data were recorded. Quantitative data are expressed as mean±SD. Analysis was done using SSPS version 1.0.

Result: Out of 4260 total admissions, 20 (0.04%) had renal diseases. There were 12 (60%) male and 8 (40%) females giving male to female ratio of 1.5:1. The mean age was 18.7±35.01 months. Renal failure, nephritic syndrome, UTI and acute glomerulonephritis accounted for 40%, 30%, 15% and 10% of renal cases respectively. Fever, oedema, abdominal pain, dark urine and arterial hypertension were common symptoms seen in 100%, 100%, 75%, 50% and 45% respectively. Mean blood pressures were systolic 122.3±46.552mmHg and diastolic 79.5±35.48mmHg. Mean electrolytes and urea re as follows: Na- 130.45±6.96 meq/l, K - 3.605±0.79meq/l, HCO₃ - 17.95±3.80meq/l, CI 100.6±4.75meq/l and urea 119.05±99.63mg/dl. Mean serum creatinine was 3.12±3.19mmol/l. The mortality rate was 10%.

Conclusion: Renal failure is a common renal dysfunction in children presenting with fever should be screened for renal dysfunction.

EVALUATION OF C-REACTIVE PROTEIN LEVELS IN NIGERIAN DIALYSIS PATIENTS

Awobusuyi JO, Onakoya JA and Balogun Y

Background: Cardiovascular diseases have been shown to be very prevalent in patients with end stage renal disease (ESRD). It is estimated to be responsible for 43.6% of all deaths in patients with end stage renal disease. Atherosclerotic outcomes including those from coronary artery disease, peripheral vascular disease and cerebrovascular disease have been shown by earlier studies to contribute significantly to these cardiovascular morbidity and mortality. Assessment of C-reactive protein values in patients with chronic kidney disease (CKD) is important due to its known role of high levels of CRP in the pathogenesis of atherothrombosis.

Results: This cross section study evaluates the levels of C-reactive protein in Nigeria dialysis patients. In the 57 dialysis patients studied, the mean CRP value was significantly higher in the dialysis patients compared with the control group $222.19 \pm 96.39 \text{ mg/L}$. (Range 46mg/L to 567mg/L) Vs $8.7 \pm 9.6 \text{ mg/L}$ (range 6mg/L to 48mg/L) $p < 0.05$. Thus, our dialysis patients are at an increased risk of atherosclerotic complications than the control group in view of the significantly higher C-reactive protein values. Secondly, our values are also much higher than the average values seen in the developed countries. This could be attributed to the higher incidence of infection related tropical nephropathies as the underlying aetiology of attributed to the higher incidence of infection related tropical nephropathies as the underlying aetiology of renal failure in our patients. Patients with acute renal failure had significantly higher CRP levels compared with patients with chronic renal failure $267.91 \pm 46.39 \text{ mg/L}$, Vs $209.92 \pm 102.86 \text{ mg/L}$, $p < 0.05$. This observation is due to the fact that active sepsis was present in 90% of the acute renal failure patients dialyzed.

Conclusion: It was concluded that baseline C-reactive protein levels in our dialysis patients are much higher than values documented by other investigations in the developed countries, due to higher aetiological contributions of infection related tropical nephropathies in our dialysis patients. Practicing nephrologists in Nigeria need to be aware of the potential heavy burden that cardiovascular diseases may pose on the clinical outcomes of CKD treatment.

Key words:- C – reactive protein, dialysis, chronic renal disease.

ECHOCARDIOGRAPHIC PARAMETERS OF CRF PATIENTS IN ILE IFE

Ojo OE¹, Akintomide AO², Sanusi AA¹, Arogundade FA¹, Akinsola A¹, Soyinka FO¹, Oyedeji TO² and Balogun MO²

Renal Unit1 and Cardiac Care Unit2, Department of Medicine, Obafemi Awolowo University Teaching Hospitals Complex, (OAUTHC), PMB 5538, Ile-Ife.

Background: Cardiovascular disease has been established to be the commonest cause of mortality in patients with Chronic Kidney Disease (CKD). The two commonly reported clinical presentations of heart disease in patients with kidney disease are atherosclerotic vascular disease (particularly CAD) and LVH. The presence of these abnormalities further exposes CKD patients to the risk for sudden CV death. Based on the above we concluded a non invasive assessment of the cardiovascular system of CKD patients using echocardiography as a way of determining type and pattern cardiovascular disease in this population.

Methodology: Forty-eight (48) patients in CKD stages 3 to 5 attending the nephrology clinic were interviewed using a structured questionnaire, biodata, anthropometric and laboratory parameters were assessed. They all underwent transthoracic echocardiography and the results collated.

Results: A total of 40 patients completed the study, 23 (57.5%) were males and 17 (42.5%) were females. Their mean age was 51.78 ± 15.08 years. 92.5% had hypertension while only 22.5% had diabetes mellitus. MABP, SBP and DBP were 118.09 ± 15.39 mmHg, 160.72 ± 22.19 mmHg and 96.77 ± 14.83 mmHg respectively. Mean ejection fraction & fractional shortening were $65.21 \pm 13.69\%$ and 30.63 ± 9.16 respectively. Left Ventricular Hypertrophy (LVM > 130g) was seen in 90.6% of the study population while 74.3% had left atrial dilatation (LAD) 70% of the patients had varying degrees of mitral regurgitation while 67.5% had varying degrees of tricuspid regurgitation, 57.5% had varying degrees of pericardial effusion though only 10% had moderate to severe effusion. 60% and 90% of the patients have various forms of systolic and diastolic dysfunction respectively.

Conclusion: LVH, LAD and pericardial effusion are quite common in our CKD population. Both systolic and diastolic dysfunction should form an integral part of management of our CKD patients.

HAEMODIALYSIS RELATED COMPLICATIONS AND MANAGEMENT IN OAUTHC DIALYSIS CENTRE

Otuyemi CB, Olarinoye F, Akoma EI, Ajayi O, Arogundade FA, Sanusi AA and Akinsola A
Dialysis Unit, Obafemi Awolowo University Teaching Hospitals Complex, (OAUTHC)
P.M.B. 5538, Ile-Ife.

Background: Dialytic therapy remains the cornerstone management modality for uraemic syndrome whether acute or chronic. Haemodialysis (HD) is the most available of these therapeutic interventions. Despite the various safety measures on the HD machines, haemodialysis is still associated with complications which could sometimes be life threatening.

Objective: We set out to determine the pattern of complications and their management in our centre.

Methodology: The dialysis records of all subjects managed between 1st January 2006 and 31st December 2006 were retrieved and analysed. The socio-demographic and clinical diagnosis of the patients, complications observed and outcome are hereby presented.

Results: A total of 82 patients had 600 sessions of HD during the year. Their ages ranged between 20 and 74 years. 12 patients had acute renal failure while 70 had chronic renal failure. The HD sessions were bicarbonate based and blood flow rates ranged between 200 and 350mls/min. One hundred and sixty one sessions (26.8%) were complicated in various ways. The commonest complication observed was dialysis induced hypertension in 72 (12%) patients while hypotension was observed in 35 (5.8%) patients. 31 (5.2%) patients had rigours while 9 (1.5%) had episodes of vomiting intradialysis. 6 (1%) of the patients had restlessness during the procedure while 2 (0.3%) patients each had backpain and pruritus. One (0.015%) patient each had muscle cramps, chest pain, tremors and hypercoagulability. All the complications were managed but 5 (0.08%) mortalities were recorded during the year.

Conclusion: HD related complications should be aggressively managed to prevent mortality.

SAFETY AND EFFICACY OF TOTAL DOSE IRON DEXTRAN THERAPY IN CHRONIC KIDNEY DISEASE: A PRELIMINARY REPORT

Soyinka FO, Ojo OE, Arogundade FA, Sanusi AA and Akinsola A

Renal Unit, Obafemi Awolowo University Teaching Hospitals Complex, Ile-Ife.

Background: Anaemia is well known to develop in the course of chronic kidney disease (CKD) and has been associated with increased morbidity and mortality. Iron deficiency is a common cause of anaemia among patients with CKD and it is responsible wholly or in part for resistance to Erythropoietin therapy. The safety profile of parenteral iron formulations have been widely reported with the incidence of life-threatening Adverse Drug Reactions (ADRs) estimated to be 0.61%. High molecular weight iron dextran which is the more readily available source of parenteral iron in this environment has been reported to have the worst ADRs. We therefore decided to study the safety profile of parenteral iron dextran infusion in our CKD patients.

Methodology: Twenty nine CKD patients were recruited for the study. Their biodata, anthropometric and laboratory parameters were assessed. The total dose of iron dextran needed per patient was calculated based on a standard formula and given as infusion. The patients were observed for ADR over a 24 hour period and their haematological parameters were then monitored over 2 weeks. Data was analysed using SPSS package.

Results: Of the 29 patients, 12 (41.4%) were females while 17 (58.6%) were males. The mean ($\pm$ SD) age was 41.6 ($\pm$ 15.3) years while the mean glomerular filtration rate was 15.97 ($\pm$ 13.88) mls/min. The dose of iron infused ranged between 1250 and 3000g (mean $\pm$ SD; 2062.5 $\pm$ 689.29g. The mean packed cell volume (PCV) prior to iron therapy was 21.96 $\pm$ 5.89% while 2 weeks post treatment it rose to had arthralgia with internal heat, nausea and urticaria. No life threatening ADR was found.

Conclusion: High molecular weight Iron dextran therapy is effective and devoid of life threatening complications in this study hence its use should be encouraged in the absence of other formulations. A more extensive study however need be carried out.

CLINICO-PATHOLOGIC STUDY OF NEPHROTIC SYNDROME AND ITS RESPONSE TO TREATMENT IN ADULT NIGERIANS

Arogundade FA¹, Sanusi AA¹, Adelusola KA², Ojo OE², Soyinka FO², Hassan M¹ and Akinsola A²

¹Department of Medicine and ²Department of Morbidity and Mortality, Obafemi Awolowo University Teaching Hospitals Complex, (OAUTHC), PMB 5533, Ile-Ife

Background: Glomerulonephritis (GN) remains a common cause of chronic kidney disease with nephritic syndrome being a common presentation in our environment. Various histological findings have been reported with mesangial proliferative GN relatively more common in Ile-Ife (Akinsola et al) and Ibadan (Kadiri et al). Minimal change GN was found to be more common in Benin (Ojo et al).

Aim: To determine histologic findings on light microscopy in adults with nephritic syndrome and assess their response to steroids and / or immunosuppressive therapy.

Methodology: We prospectively studied patients that presented with nephritic syndrome over a 6 year period. Socio-demographic data, clinical and laboratory parameters were retrieved and renal histopathology was carried out. They were managed with steroids and/or immunosuppressive therapy for periods ranging between 3 months and 3 years and the results collated. The data was analysed using SPSS package.

Results: A total of 44 patients completed the investigations and treatment which comprised 29 (65.9%) males and 15 (34.1%) females. The commonest presenting features were body swelling and frothiness of urine in 68% and 57% of patients respectively. 18% of the patients had oliguria while another 18% had uraemic symptoms. Renal histopathology (light microscopy) revealed minimal change GN and mesangial proliferative GN in 6 (13.6%) patients each, 5 (11.4%) patients each had membranous GN and Focal segmental GN. Mesangiocapillary GN was found in 4 (9.1%) while diffuse proliferative GN and amyloidosis were found in 2 (4.5%) patients each. All the patients had a combination of Angiotensin Converting Enzyme Inhibitors and diuretics while only 50% had steroids and only 13.6% had immunosuppressive therapy. 36.4% of the patients relapsed between 2 weeks and 4 months of discontinuing therapy.

Conclusion: Minimal change GN and membranous GN were found to be common. Steroid and immunosuppressive therapy was beneficial in some of the patients. There is the need for immunoperoxidase/immunofluorescence staining and electron microscopy to further characterize the histology of the glomerular lesions in our nephrotics.

PATTERN OF DYSLIPIDAEMIA IN CKD PATIENTS IN ILE IFE

Ojo OE, Soyinka FA, Sanusi AA, Arogundade FA and Akinsola A

Renal Unit, Department of Medicine, Obafemi Awolowo University Teaching Hospitals Complex, (OAUTHC), PMB 5538, Ile-Ife

Background: The number of patients with chronic kidney disease (CKD) is increasing worldwide with cardiovascular death being the commonest cause of mortality. CKD is associated with dyslipidaemia which worsens with disease progression and is worsened by the different modalities of renal replacement therapy. Unfortunately, there is paucity of data on the lipid profile among CKD patients in our environment hence our decision to conduct this study.

Methodology: Thirty-five (35) patients in CKD stages 3 to 5 attending the nephrology clinic were interviewed using a structured questionnaire their biodata, anthropometric and laboratory parameters were assessed. They had their fasting lipid profile assessed and the data analysed with SPSS package.

Results: Twenty-nine (29) patients completed the study; their mean age was 49.62 ± 16.12 years. 62.5% were male and 37.5% were females. 20.4% were diabetics while 88.9% were hypertensive and 38.2% take alcohol. MABP, SBP and DBP were 118.58 ± 16.63 mmHg, 160.16 ± 23.12 mmHg and 97.79 ± 15.93 mmHg respectively. Mean eGFR was 25.13 ± 17.27 ml/min. Serum creatinine, urea, calcium and phosphate were 581.69 ± 511.44 μ mol/l, 122.28 ± 23.05 mmol/l, 2.07 ± 0.24 mmol/l and 1.47 ± 0.51 mmol/l respectively. Mean total cholesterol, triglyceride (TG), LDL and HDL was high in 4.8 ± 2.1 mmol/L, 1.05 ± 0.75 mmol/L, 2.6 ± 1.6 mmol/L and 1.6 ± 0.57 mmol/L respectively. LDL was high in 48.3% of the patients while HDL was low in 23.1%. Triglyceride was high in 16% while 50% had elevated total cholesterol. There was a good correlation between total cholesterol and LDL, TG and HDL with correlation coefficients of 0.830 ($P=0.000$), 0.539 ($P=0.005$) and 0.483 ($P=0.012$) respectively while none exist between age, eGFR and the lipid fractions.

Conclusion: Total cholesterol, LDL and TG were elevated in some of studied patients while HDL was also low in some. All these could increase coronary heart disease risk in our CKD population. However, there is need for controls both from both general and hypertensive populations.

NEPHROLOGY MULTICALC A DIGITAL AND AUTOMATED TOOL FOR RENAL FUNCTION ASSESSMENT

Eyaru S G, Oviasu E, Unuigbo EI and Ifode O E

Dept. of Medicine, University of Benin Teaching Hospital (UBTH), Benin, Edo State

Background: Current trend in Renal Function Assessment involve the use of Prediction Equations which produce estimates of GFR (eGFR) based on biochemical, demographic and anthropometric data. This has been found to be more reliable and clinically useful for evaluating Kidney function in a broad range of clinical settings compared to use of creatinine clearance measurements. However, the complexity of some of these equations requires the use of digital & automated tools like Nephrology MultiCalc to handle a wide array of pertinent Medimatical Computations that are otherwise quite impossible.

Methods: Nephrology MultiCalc was developed on the platform of Microsoft Technology using a Programming Language – Visual Basic 6.). Nephrology MultiCalc is programmed to be simple and user – friendly in the automation and digitalization of Nephrology Computations relevant in Renal Function Assessment.

Result: Nephrology MultiCalc replaces slow inflexible and error-prone paper and manual calculations by rapidly generating answers to various eGFR Prediction Equations without any manual calculation on the part of the user. It greatly extends the concept of Medimatical computations by enabling multiple calculations that are otherwise quite impossible thereby liberating healthcare professionals to do more productive work.

Conclusion: Nephrology MultiCalc is a fulfillment of “Computer Automation for Medical Practice” as there will be NO MORE PAPER CALCULATION! No more human errors in Medimatical Computations. No more tasking and distraction of the Brain with calculations in stacks of paper. Hence, healthcare professionals are energized to meet the demands of fast, efficient and high Quality care.

Keywords: *Nephrology MultiCalc, Creatinine, Renal Function Assessment, Glomerular Filtration Rate, Chronic Kidney Disease, Prediction Equations, Early Detection, Prevention.*

PATTERN OF LUPUS NEPHRITIS IN BENIN CITY, NIGERIA

Onwuchekwa UN, Jisieike NN, Chukwuonye II and Oviasu E

Renal Unit, Department of Medicine, University of Benin Teaching Hospital, Benin City, Nigeria

Background: Systemic Lupus Erythematosus (SLE) is an autoimmune disorder, which chiefly affects the skin, kidneys, joints, serous membranes and blood vessels. Globally, Lupus Nephritis (LN) is a frequent and potentially serious complication of SLE. However, in the Nigerian setting, this health burden appears to have so far received relatively little attention in the published literature.

Aim: The present study was aimed at determining the pattern of clinical presentation, renal function, treatment and outcome of management of Lupus Nephritis, as seen in Benin City, Nigeria.

Methodology: The case records of all patients with Lupus Nephritis seen at our renal unit between January 2000 and November 2006, were reviewed and analyzed. The socio-demographic, clinical characteristics, renal function, histological findings and treatment/outcome are hereby presented.

Results: A total of 15 patients were identified; all were females with mean age of 31.07yrs (range:15-49). All had facial and leg swelling at presentation. The commonest extra-renal manifestation was athralgia 13(86.7%), followed by photosensitive rash 12(80%). The classical malar rash was present in 10(68.7%); serositis and discoid rash were found in 8(53.3); oral ulcer and central nervous system disorders in 7(46.7%). All the patients fulfilled the ARC diagnostic criteria; 10(68.7%) had positive L.E.cells; 13(86.6%) had varying degrees of proteinuria, while haematuria was present in 8(53.3%). Their systolic, diastolic and mean arterial blood pressure were 138.66 ± 31.59 , 81.33 ± 15.05 and 96.26 ± 20.22 , respectively. The calculated mean GFR(MDRD);serum creatinine, urea, ESR and PCV were 56.53 ± 47.67 ml/min, 3.9 ± 3.1 mg/dl, 149 ± 105 mg/dl, 182.60 ± 80.89 (westergreen), and 25.7 ± 7.7 , respectively. Renal histology in 7 patients biopsied revealed Membranoproliferative GN(MPGN)in 1, Membranous GN(MN) in 2 and Diffuse Proliferative GN(WHO Class IV) in 4 cases. All patients received a treatment regimen consisting either solely of oral Prednisolone or in combination with Azathioprine plus initial intravenous Methylprednisolone (3doses). The best patient and renal outcome was record in those treated with Azathioprine containing regimen. All these patients (9) are alive and well, 4 of whom have been followed up for over 3yrs. Of those who had Prednisolone as sole therapeutic agent, 3 are lost to follow up, while 3 others have died from various complications.

Conclusion: Lupus Nephritis is not uncommon. Its early recognition and prompt institution of appropriate treatment can result in favourable renal and patient outcome, even in an economically depressed environment.

Keywords: *Systemic lupus, lupus nephritis, azathioprine, prednisolone, Nigerian setting.*

PREVALENCE OF RENAL FAILURE AMONG PAEDIATRIC MORTALITIES AT A TERTIARY HEALTH INSTITUTION

Asinobi AO¹, Ademola A¹, Adedokun B² and Ogunkunle OO¹

Departments of ¹Paediatrics and ²Community Medicine, University college Hospital, Ibadan

Background: Acute renal failure (ARF) is frequently underdiagnosed. Consequently, the contribution of renal failure to morbidity and mortality in ill children is not fully appreciated. The reported major causes of childhood morbidity and mortality in our environment-diarrhoeal diseases, malaria, septicemia, severe birth asphyxia and malignancies are potentially associated with renal injury and failure. Studies on mortality patterns from various Paediatric units in Nigeria (including Emergency Rooms/Special Care Baby Units) have not identified ARF as a problem. The primary diseases are usually highlighted but the significant contributors to morbidity and mortality are not sought. In many instances, relevant renal function tests are not carried out and even where they are done, delay in obtaining results usually gives rise to the diagnosis of ARF being made very late/post mortem. This is unacceptable as ARF in most instances is reversible.

Aim: The study aimed to determine the prevalence of renal failure amongst paediatric mortalities at a tertiary health institution.

Methodology: Data on all paediatric mortalities at our centre are recorded on mortality cards and kept, in the Department of Paediatrics, University College Hospital Ibadan. The mortality cards from August

2004 to May 2006 were studied with focus on total mortality and patients with renal failure. Clinical and laboratory data were reviewed from case-notes in order to confirm the causes of death. Results of renal function tests were extracted. Data obtained were analysed using the SPPSS 11.5 for Windows software.

Results: There were 542 mortalities out of a total of 4,941 admissions over a 21 – month period. Serum urea and creatinine were estimated in only 217 (40%) and 49 (9%) of these critically ill patients respectively. Ante-mortem diagnosis of renal failure was made in 13 (2.4%) of the mortalities whereas the diagnosis of renal failure (defined as serum urea > 150mg/dl and/or serum creatinine > 3mg/dl) was missed in 50% of cases. Renal failure contributed to 26 (11.7%) deaths amongst those investigated. Financial constraint was one of the reasons for not carrying out renal function tests in these patients.

Conclusion: This study underscores the need for adequate monitoring of renal function in paediatric patients, particularly critically ill ones. Identification of at-risk patients so as to enable early and appropriate management will reduce morbidity and mortality among our children.