

Abstracts of Papers Presented at NANCONF 2005

ACUTE RENAL FAILURE IN NIGERIAN CHILDREN: PORT HARCOURT EXPERIENCE

Anochie IC and Eke FU

Department of Paediatrics, University of Port Harcourt Teaching Hospital (UPTH), Port Harcourt

Introduction: Acute renal failure (ARF) is a significant cause of morbidity and mortality in children. It may be pre-natal, intrinsic, or post-renal (obstructive) in etiology. ARF was investigated in children in south-southwestern part of Nigeria to determine the prevalence, etiology, management and outcome of ARF.

Methods: A retrospective review of data of all children from birth to 16 years of age admitted into the Department of Paediatrics, University of Port Harcourt Teaching Hospital (UPTH), with the diagnosis of ARF over an 18 year period (January 1985 to December 2003) was performed. Information was obtained on the age, sex, clinical features, blood pressure, laboratory and radiological investigations, etiology and treatment received including dialysis. Information on the outcome, factors influencing outcome and possible causes of death were reviewed.

Results: There were 211 patients, 138(65.4%) males and 73(34.6%) females (M:F, 1.9:1), with a hospital prevalence of 11.7 cases / year. The patients were aged 5 days to 6 years (mean $5.6 \pm$ years). Oliguria was the commonest clinical presentation by 184(87.2%) patients. Hypertension was seen in only 39(18.5%) patients. The causes were aged related. The infants had ARF mainly from severe birth asphyxia 27(35.5%), septicaemia 17(22.4%), tetanus 4(5.3%) and congenital malformations 11(14.5%). Sixty-one (28.9%) and 29(13.7%) patients had ARF from gastroenteritis and malaria respectively. The patients with leukemia were all above 10 years, and had acute lymphoblastic leukemia. Two patients (1.9%) had Burkitt lymphoma involving the abdomen while three patients had HIVAN. 112(53%) patients had anaemia with a mean haematocrit of $20.25 \pm 6.9\%$. Dialysis was indicated in 108 patients, but only twenty-four patients (22.2%) had peritoneal dialysis (PD) due to financial constraints and lack of dialysis equipment. Mortality rate was 40.5%. The causes of death were uremia 60(70.6%), overwhelming infection 5(5.9%) and recurrent anaemia 20(23.5%). The presence of hypertension ($X^2 15.7, P < 0.001$) and non dialysis ($X^2 4.8, P > 0.05$) significantly influenced outcome. Other factors associated with demise were delayed presentation (58.8%), use of herbal treatments (35%) and unaffordability of treatment (40%).

Conclusion: ARF is a significant cause of mortality in Nigerian children. The patients are not adequately managed due to poverty and lack of facilities for dialysis. The causes of ARF in our environment are preventable, and should be anticipated. There is increasing incidence of HIVAN in Nigerian children.

INDICES OF SEVERITY AND OUTCOME IN ARF IN THE INTENSIVE CARE UNIT: A PRELIMINARY REPORT

Okunola OO, Arogundade FA, Sanusi AA, Akinsola A, Pedro Emem Chioma and Ojo EO
*Renal Unit, Department of Medicine, Obafemi Awolowo University Teaching Hospitals Complex,
Ile-Ife, Osun State.*

Aim: To determine the magnitude of the problem of acute renal failure in patients at the ICU and to determine the relationship between the severity of ARF and outcome.

Methodology: 40 consecutive ICU patients with rapidly rising urea and creatinine above 8mmol/L and 140 mol/L respectively were recruited. Their detailed socio-demographic and clinical data was obtained. ARF

severity was assessed using modified APACHE II and specific ARF score (LIANO). Data was analysed using SPSS package Version 10.

Results: Forty patients out of a total of 204 managed in the ICU during the period developed ARF constituting 19.6%. Their ages ranged between 16 and 75 years (mean \pm SD 39 ± 4.1). Twenty-eight 28 (70%) of them were males and females constituted 30%. The mean values for serum urea and creatinine were 15.24 ± 5.19 mmol/L and 363 ± 49.4 mol/L respectively. The major aetiology for admission into ICU was Head injury (30%), major Burns (20%) and multiple fractures (10%). The Liano score ranged between 33% and 99% (mean \pm SD; $61\% \pm 4.2$) while modified APACHE II scores ranged between 5 and 19 (mean \pm SD; 11 ± 3.2). In all only 8 patients (20%) survived. Apache II scores were not found to predict mortality ($P=1.0$) while Liano scores were strongly predictive of mortality ($P=0.0007$). Dialysis therapy significantly influenced outcome as more of the dialyzed patients survived ($P=0.0015$).

Conclusion: ARF is still common in the ICU and mortality is very high. Liano scores were strongly predictive of mortality while APACHE II scores were not. Dialysis therapy significantly influences survival.

ACUTE RENAL FAILURE COMPLICATING OBSTETRIC CONDITIONS: MANAGEMENT STRATEGIES AND OUTCOME

Olarinoye OF, Akoma EL, Afolami AO, Sanusi AA, Arogundade FA and Akinsola A
Renal Unit, Department of Medicine, Obafemi Awolowo University Teaching Hospitals Complex,
Ile-Ife.

Background: Maternal mortality in Nigeria is one of the worst in the world. We recently observed an upsurge in the cases of ARF complicating obstetric emergencies that needed haemodialysis and we feel this could further worsen the maternal mortality figures. Our aims is to identify the predisposing factors and management outcomes in the hope that this will engender preventive strategies.

Methodology: The records of all ARF patients dialysed was reviewed. Their clinical characteristics, aetiology, complications and outcome were noted. The number of dialysis sessions delivered was also documented. Data was analysed using SPSS package version 10.

Results: A total of 22 ARF cases were dialysed during the 12- month period out of which obstetric cases accounted for 11(50%). Their age range was 16-40 years. Four were traders, 3 civil servants. 3 students and 1 artisan. The predisposing condition was eclampsia in 5?(45.5%), puerperal sepsis complicating Caesarean section was seen in 4 patients (36.4%) and post abortal sepsis was seen in 2(18.2%). The mean number of HD sessions was 3.5. Majority of the patients were unbooked and the surgeries were carried out in remote hospitals. Eight patients (72.8%) survived, one became dialysis dependent (cortical necrosis), one died of overwhelming sepsis while the last one discharged against medical advice.

Conclusion: The incidence of obstetric related ARF is high. High –risk patients should be encouraged to book in the tertiary centres. Quacks should be prosecuted to serve as deterrent to others. All these will assist in reducing maternal mortality in our environment.

FAMILY SUPPORT: A FACTOR IN COMPLIANCE WITH MEDICAL REGIMEN AMONG PATIENTS WITH CHRONIC RENAL FAILURE

Ayandiran EO, Ojo AA and Fajemilehin RB

Department of Nursing Science, Obafemi Awolowo University, Ile-Ife.

E-mail: olufeman@yahoo.com; adearaojo@yahoo.com; fajemilehin@yahoo.com

Background: Treatment of patients with Chronic Renal Failure (CRF) is life long and carries with it a fair degree of behaviour modification. This tends to inhibit compliance. However, it is believed that factors that enable a patient to adhere to a life long therapy as in CRF, are largely more psycho-socio-cultural than physiological.

Aims: This study therefore examined the effect of family support on compliance with medical regimen among patients with CRF attending OAUTHC, Ile- Ife.

Method: Thirty-two purposefully selected patients with CRF formed the study population. A structured interview schedule adapted from three instruments used in previous studies on compliance was the major tool used. The adapted version was tested for validity and reliability with a correlation coefficient of 0.73 before administration. The patients biochemical parameters were also studied for clinical evidence of compliance. Data collection took 28 weeks. Data collected were analysed using descriptive and inferential statistics. Results showed that majority (59.4%) of the respondents were 14-37 years old, mainly males (71.9%), majority were literate (84.4%) and 56.3% were married. The study revealed a varied perception of familial support across the educational level and both sexes. Furthermore, findings revealed that the family plays a crucial role in promoting and sustaining adherence with medical regimen among patients with CRF ($r = 0.56$, $p < 0.05$).

Conclusion: the study therefore advocates that effort should be intensified to maximize the close family ties that are known to exist among Nigerians in fostering compliance among CRF patients in this environment.

EPIDEMIOLOGY, CLINICAL CHARACTERISTICS AND OUTCOMES IN ESRD PATIENTS IN NIGERIA; IS THERE A CHANGE IN TREND?

Arogundade FA, Sanusi AA and Akinsola A

Department of Medicine, Obafemi Awolowo University Teaching Hospitals Complex, Ile-Ife, Nigeria.

Background: Chronic renal failure and end stage renal failure are highly prevalent worldwide. The epidemiology has changed significantly in the last decade particularly in industrialized countries with diabetes being the commonest cause. While there have been significant improvements in patients' outcomes worldwide, their state and survival is still appalling in developing countries particularly in Nigeria. We reviewed our data over a 15-year period (1988-2003) to determine the epidemiology and survival in our CRF population.

Methodology: Five hundred and forty patients' records were reviewed. The data on major cause, clinical presentation, renal replacement therapy offered and survival were retrieved and collated. Data was analysed using SPSS package version 10.

Results: Their ages ranged between 15-90 years (Mean \pm SD; 38.2 ± 16.4 years), there was a male preponderance with 376 (69.6%) being males. Major presenting complaints were body swelling (67.8%), uraemic symptoms (60.4%) and dyspnoea on exertion (3.3%); 47% had headaches while 24.6% of them had associated blurring of vision. Twenty-two percent had past history of renal disease. Aetiologic factors include hypertension (29.8%), chronic glomerulonephritis (27.8%), obstructive uropathy (5%), diabetes mellitus (3.1%), tubulointerstitial nephritis (2.8%), and polycystic kidney disease (1.1%), 72.4% had stage 2 hypertension

(JNC VII) while only 34.1% had clinical cardiomegaly. 70% of those that had fundoscopic examination had either grade III or IV. Renal replacement therapy offered included HD in 474 (88%), CAPI in only 9 (1.7%) patients and renal transplantation in only 5 (0.9%). Only 20 (4.2%) were able to survive on HD for longer than 3 months while 7 (77.8%) CAPI patients and all transplanted patients survived for between 6 months and 3 years ($P < .000001$). Median duration of survival after diagnosis for all the patients was 2 weeks while the mean was 3.92 ± 12.52 months.

Conclusion: End stage renal disease is still prevalent with hypertension and chronic glomerulonephritis being the common causes. Prognosis is still grave as most patients survive for less than 1 month.

END-STAGE RENAL DISEASE AT THE LAGOS UNIVERSITY TEACHING HOSPITAL NIGERIA: A 10-YEAR UP DATE REVIEW

Menakaya NC, Adewunmi AJ, Braimoh RO and Mabayoje MO

Renal Unit, Department of Medicine, Lagos University Teaching Hospital, Lagos.

Background: To give a 10-year update review on Chronic Haemodialysis as seen at the Dialysis centres, Lagos University Teaching Hospital, Nigeria (LUTH). The experience of the first 10 years of the centres. (Nov. 1981 to Nov. 1991) has been previously reported.

Subjects and Methods:- All cases of ESRD referred to and managed by the dialysis centres at the Lagos University Teaching Hospital (LUTH) between April 1994 and April 2004 were included in the study. Data were obtained from the renal registry of the centres. Data obtained from the registry included, age, sex, Hepatitis B surface antigen (HbsAg) and Hepatitis C virus antibody status of the patients. Other indices included aetiology of renal failure, associated co-morbidities and mortality rate. Being a retrospective study only available data were reviewed and analysed. Haemodialysis was the main stay of treatment and was performed using fresenius 4008 B machines. The patients were dialysed one to three times weekly depending on availability of software and ability of the patients to pay for them as there is no government funding for haemodialysis in Nigeria. Six patients were referred abroad for renal transplantation. Underlying aetiology of ESRD was determined on the basis of clinical and ultrasonic indices as most of the patients presented in the very late stages of the disease.

Results: These were 454 new cases of ESRD at the centres during the review period giving an average of 45 new cases per year. Of these, 293 (64.5%) were males, and 161 (35.5%) were females. Majority of cases 264 (61.4%) were less than 50 years of age. The age records of 24 patients were not indicated. In terms of aetiology of ESRD, Hypertension represented the commonest underlying cause of ESRD accounting for 63.2% of cases, diabetes mellitus accounted for 5%, and chronic glomerulonephritis 14.2%. Both hypertension and diabetes were present in 6.8% of the patients. Less common aetiologies were autosomal dominant polycystic kidney disease (2.8%); connective tissue disease (1.0%) sickle cell disease (1.0%); metastatic malignancies (1.0%), toxic nephropathy (0.7%); Hansens disease (0.3%). Aetiology of ESRD was undetermined in 54 cases. In terms of associated features, 10.8% had associated cardiovascular morbidity such as congestive heart failure, hypertensive heart disease, and dilated cardiomyopathy. Of 319 patients in whom screening for Hepatitis B surface antigen (HbsAg) was done, 59 (18.5%) tested positive while of 80 patients who were screened for Hepatitis C (HCV) antibody, 8(10%) were positive. One hundred and thirty-five (29.7%) patients died during the course of their dialysis scheduling at the centres during the period of review, fifteen others (3.0%) have either transferred to other units or are currently still dialysing at the centre. The vast majority of the patients, 296(65.2%) were lost to following up and are mostly presumed to have died consequent upon their inability to continue dialysis due to financial constraints. Six patients (1.3%) had a kidney transplant during the period of review, all of which were live-related graft donations.

Conclusion: The incidence of ESRD rose at a rate of 2.3% per year in our centre in the last 10 years in comparison with the previous 10 years review. Hypertension remains by far the commonest underlying aetiology factor, and mortality from ESRD remains unacceptably high despite advances in the treatment of ESRD. Haemodialysis treatment though available remains out of reach of the vast majority of patients due to high cost of the facility. Renal transplantation is now available in the country and is equally out of reach to the vast majority.

Prevention therefore is the best approach to end-stage renal disease in our setting. Hypertension is eminently treatable, there is a need for practical and effective measures for early detection of hypertensive cases, and for availability of affordable and effective medications for treating and controlling hypertension. For instance medications not produced locally could be imported duty-free. Furthermore, an effective screening programme for early detection for renal disease so as to enable appropriate intervention to reverse or slow down the progression of the disease is imperative. Also vital is the need for an effective community education programme on modifiable risk factors for hypertension and renal disease such as salt intake, cigarette smoking, dyslipidaemias, analgesic abuse, and use of unrefined traditional remedies. Hepatitis B virus infection is relatively common in our ESRD population and may have implication for renal transplantation outcomes.

ACUTE RENAL FAILURE IN NIGERIA - NEED FOR INCREASED AWARENESS AND EARLY REFERRAL

Arije A, Ipadeola A, Oko-Jaja R, Salako BL and Kadiri S

Renal Unit, Department of Medicine, University College Hospital, Ibadan.

Background: This study was carried out with the main objective of highlighting some factors that influence morbidity and mortality in acute renal failure (ARF) in this environment.

Methods: Six patients admitted and managed for ARF in the Renal Unit of the University College Hospital, Ibadan were reviewed for this study. All 6 patients were seen within a period of 4 weeks in the Unit, and presented with clinical and biochemical features of severe renal function derangement, which from the history were suggestive of a recent onset. There were 3 males and 3 females aged between 18-84 years.

Results: There was a period ranging from 5-14 days (mean 9 days) from the time the patients were first seen by the peripheral / private health care doctor and referral to the tertiary care facility. The diagnosis or suspicion of ARF was not made in any of the patients from the referring hospitals despite the presence of an etiological factor for ARF in each patient. In all the patients except 1, there was a delay of between 2-9 (mean 4) days in the tertiary hospital before eventual referral to the renal unit. In all the patients dialysed (5 out of 6) there was a delay of between 4-9 days (mean 6 days) from arrival at the renal unit and eventual dialysis.

Conclusion: Increase awareness of the causes and presence of ARF coupled with early referral to specialized units for management are vital in reducing morbidity and mortality associated with ARF in Nigeria. The roles of economic as well as infrastructural constraints are discussed.

COST ANALYSIS OF CARE OF DIALYSIS PATIENTS IN MAIDUGURI

Ummate I and Nwankwo EA

Nephrology Unit, UMTH, Maiduguri

Background: Haemodialysis is a very expensive form of treatment of patients with kidney failure worldwide. In the US where cost of dialysis is borne by the medicare the USRDS estimates that about 5% of the health

budget is spent on <1% of the population requiring RRT. Out of pocket payment for dialysis is used in our centre. In this study we examined the financial burden of renal care to kidney failure patients in Maiduguri.

Method: Consecutive maintenance haemodialysis patient were interviewed on their individual expenditure on healthcare per month. The cost of healthcare to the patients included cost of in patient care, cost of laboratory radiologic investigations, cost of dialysis, cost of purchase of consumables, transportation for out patient dialysis and cost of construction of vascular access.

Results: Fifteen (15) maintenance haemodialysis patients made up of 9 males and 6 females were interviewed. They had received dialysis for between 6 months and 4 years. Frequency of dialysis was twice weekly (8/15) once weekly 3/15 and once in more than one week 4/15. None of the patients could afford recombinant erythropoietin treatment. With dialysis fees of 4,000 naira per session patients spent approximately (between) 15-60,000 per month on health care.

Conclusion: Finance is a major factor in determining adequacy of renal care in Maiduguri.

PAEDIATRIC ACUTE PERITONEAL DIALYSIS IN SOUTH-SOUTHERN NIGERIA

Anochie IC and Eke FU

Department of Paediatrics, University of Port Harcourt Teaching Hospital (UPTH)

Background: Acute peritoneal dialysis (APD) has generally been used for isolated failure of the kidney in children and is universally available in developed countries. However, the same cannot be said about its availability in developing countries. We reviewed children with acute renal failure (ARF) who had APD in Port Harcourt, Nigeria.

Methods: Consecutive case files of patients who had APD from January 1985 to December 2004 were studied. We obtained information on their age, sex, indications for dialysis, investigations, and outcome in each patient. Histopathologic report of renal biopsy was also reviewed.

Results: Two hundred and twenty-one (221) patients, 147 boys and 74 girls (M:F. 1.99:1) with a mean age of 5.4 + 4.9 years had ARF out of which dialysis was indicated in 112 cases. The frequency of indications was due to both clinical and laboratory presentations. 30(36.8%) were due to convulsion/uremia, 24(21.4%) heart failure, 23(20.5%) pulmonary oedema and 10(8.9%) intractable hypertension. APD was provided to only 27 patients (21 boys and 6 girls) due to financial constraints and lack of dialysis materials in the hospital. This gave a dialysis access rate of 24.1%. They were all manual peritoneal dialysis. The duration of APD ranged from 6 to 8 days, with an average of 6 cycles /day. Only one neonate received PD during this period. Among the patients with ARF 90 died, given an overall mortality rate of 40.7%. Six (2.7%) of the dialyzed patients died.

Conclusion: - APD is effective in reducing mortality of children with ARF. However, dialysis access is very low in our environment. We recommend efforts aimed at producing the necessary materials for dialysis in Nigeria, as well as reducing the cost of dialysis in children.

DISLODGED BROKEN FEMORAL CATHETER IN FEMORAL VEIN: AN UNUSUAL VASCULAR ACCESS COMPLICATION

Salako BL, Kadiri S, Arije A, Oko-Jaja R and Ipadeola, A

Background: The major clinical complications experienced by patients undergoing hemodialysis are hypotension, cramps, bleeding, dialysis disequilibrium and electrolyte disturbances. Renal osteodystrophy, dialysis

dementia and accelerated cardiovascular disease may also occur. Vascular access complications include vascular access infection and thrombosis. In our practice, we use more of acute vascular access in the form of femoral vein catheterization. Recently we experienced dislodgement of a femoral catheter head in the femoral vein in 3 of our patients undergoing hemodialysis.

VASCULAR ACCESS FOR DIALYSIS

Ayo Shonibare

Vantage Medical Centre, Lagos, Visiting Consultant, Saint Nicholas Hospital, Lagos

Background: The importance of Vascular Access in patients with ESRD cannot be over emphasized. This was recognized by Nephrologists in the 1970's many of whom cared for patients who ultimately died as a result of failure to gain access to the circulation. Early planning prior to commencement of dialysis often yields optimal dialysis outcome with improved quality of life for the patient. Moreover, it ultimately leads to a more efficient patient flow in dialysis units and creates better time management for dialysis nurses and Nephrologists. Vascular Access modalities include: arteriovenous fistulae, arteriovenous grafts, non-tunnelled catheters and tunnelled catheters. However the procedure of first choice remains the native radialcephalic fistula. The vast majority of Dialysis Centres in Nigeria use repeated femoral cannulations as the predominant modality for dialysis vascular access. This pattern of practice is suboptimal because of significant morbidity and mortality associated with this technique. It is therefore most appropriate now to introduce a multidisciplinary approach involving Nephrologists, Vascular Surgeons and Radiologists so as to change the modes of vascular access to conform with standard 'best practice' procedures.

TARGET ORGAN DAMAGE AND ASSOCIATED CLINICAL CONDITIONS AMONG NIGERIAN HYPERTENSIVES ATTENDING A SECONDARY HEALTH CARE FACILITY.

*Ayodele OE, Alebiosu CO, Salako BL, Awodein OG, and Adigun Abass B
LAUTECH Teaching Hospital, Osogbo. Email: gbengaaypx@yahoo.com*

Background: Systemic hypertension is the commonest non-communicable disease in Nigeria. Hypertension is associated with certain target organ damage (TOD) and associated clinical conditions (ACC).

Aim: This study assessed the extent, pattern and predictors of TOD/ACC in patients with hypertension in Nigeria. This may have a bearing on resource and manpower allocation.

Materials / Methods: The study was carried out at the Medical Outpatient Department of a State Hospital, Abeokuta, Ogun State. Target organ damage was assessed in these patients. Predictors of TOD/ACC were also sought for.

Results: A total of 203 patients, 73 men (36.0%) and 130 women (64.0%) constituted the study population. One hundred and twenty two patients (60.1%) had TOD / ACC. There was a statistically significant association between systolic blood pressure and TOD/ACC. Patients with overall blood pressure (BP) control [i.e BP<140/90 mmHg] had more TOD compared with those that had overall uncontrolled BP (i.e BP>140 / 90 mmHg) though the difference was not statistically significant ($X^2= 1.5, p >0.05$). The association between length of treatment and TOD/ACC approached significance ($X^2 =9.35, p =0.053$).

Conclusion: The study showed a high prevalence of TOD/ACC in treated hypertensive. A positive association

was shown between systolic BP and TOD/ACC. Early detection of hypertension and strict blood pressure control will help in reducing TOD/ACC in the hypertensive population.

RISK PROFILE IN NEWLY DIAGNOSED HYPERTENSIVES IN NIGERIA

Ojo OE, Arogundade FA*, Bello-Sanusi AA*, Afolabi MO** and Akinsola A**

**Department of Medicine, Obafemi Awolowo University Teaching Hospitals Complex, Ile-Ife.*

***Department of General Medical Practice, Obafemi Awolowo University Teaching Hospitals Complex, Ile-Ife.*

Background: The prevalence of hypertension is high and a lot of our patients present with severe complications at the time of first visit. The prevalence of chronic renal failure, cardiac failure and cerebrovascular disease had remained high. We set out to determine the proportion of our newly diagnosed hypertensives with evidence of end organ damage. We also sought to find out the factors that could be predictive of complications.

Materials and Methods: One hundred and fifty seven newly diagnosed hypertensives seen at the primary care unit were recruited. They had sociodemographic, clinical and anthropometric evaluation and the data obtained was collated. Baseline serum chemistry and urinalysis were also carried out. Data was analysed using SPSS package version 10.

Results: All the patients completed the study. Their ages ranged between 25 and 96 years (Mean \pm SD; 57.96 ± 13.15 yrs) and majority of them were females (56.7%). 47.1% had family history of hypertension while 17.8% had concomitant diabetes mellitus. 31.2% consumed some alcohol while only 9.6% were smokers of cigarettes. Their body mass index (BMI) ranged between 18.29 and 42.42 kg/m² (Mean \pm SD; 26.33 ± 4.47 kg/m²). Mean systolic blood pressure (SBP), diastolic blood pressure (DBP); serum creatinine (SCR) and urea (SUR) were 164.57 ± 17.13 mmHG, 120.48 ± 10.91 mmHg, 115.13 ± 26.10 mol/L and 4.44 ± 1.57 mmol/L respectively. Sixteen percent had elevated SCR and SUR, 29.3% of them had 1+ proteinuria while 4.5% had 2+ SBP respectively. There was no such correlation with DBP though mean arterial BP also correlated with serum creatinine ($r = 0.207$, $P = 0.018$).

Conclusion: A high percentage of our newly diagnosed hypertensives have end organ damage. Health education and community screening should be designed. Renal protective drugs should be encouraged in those with proteinuria and elevated SCR.

MALIGNANT RENAL TUMOURS IN ADULT: A TEN YEAR REVIEW AT OBAFEMI AWOLOWO UNIVERSITY TEACHING HOSPITALS COMPLEX, ILE-IFE, NIGERIA.

**Badmus TA, *Adesunkanmi ARK, Sanusi AAA, Arogundade FA, *Salako AB, **Oseni OG, ** Yusuf BM and **Eziyi AK*

*Departments of *Surgery and Medicine, Obafemi Awolowo University and **Obafemi Awolowo University Teaching Hospitals complex, Ile-Ife.*

Aim and Objectives: To determine the pattern of presentation and histopathological types and outcomes of management of adult patients with malignant renal tumours.

Materials and Method: Hospital records of all adult patients with malignant renal tumours managed in our institution over a ten-year period were reviewed retrospectively. Information extracted and analyzed included age, gender, clinical features, investigations, histopathology diagnosis, surgical procedure, outcome of management and duration of follow-up.

Results: During the period, seventeen adult patients with mean age 45.6 years; ranged 16-72 were managed for malignant renal tumours. The M:F ratio was 12.5 and the mean duration of symptoms was 40.1 wks (range 2-144 wks). Tumour was located on the left side in 9 (52.9%) patients and on the right in 8 (47.1%). The average tumour mass removed at surgery was 1.947 kg (ranged 0.42-3.82 kg). Common symptoms included loin pain in 94.1%, abdominal mass in 82.4%, weight loss in 70.6% and haematuria in 52.9%. Twelve (70.6%) patients had radical nephrectomy, average tumour mass removed was 1.947 kg (range 0.42 – 3.82 kg) and histopathology confirmed renal cell carcinoma in 9 (75%). Post nephrectomy complications included primary haemorrhage in 2 (16.6%), tumour recurrence cystitis and hypertrophic scar in 1 (8.3%) patient each. The average duration of hospital stay post-nephrectomy was 9.5 days (ranged 6-17). Till date, 7 (58.3%) of them are alive and well after average duration of follow up of 37.9 months (ranged 12-60), 2 (16.6%) died 7 and 50 months post-nephrectomy while 3 (25%) were lost to follow up after an average period of 9.5 (ranged 3-17) months. All the five patients that could not have definitive surgery died in 2-3 months.

Conclusion: Renal cell carcinoma is the commonest malignant renal tumour and prominent presenting symptoms are loin pain, loin swelling, weight loss and haematuria. Radical nephrectomy was found to be beneficial in locally advanced non-metastatic malignant renal tumours.

RENAL BONE DISEASE IN ESRD PATIENTS IN ILE-IFE : A PRELIMINARY REPORT

Sanusi AA, Arogundade FA*, Oladigbo M*, Ogini LM**, Sharp C*** and Akinsola A**

**Department of Medicine, Obafemi Awolowo University Teaching Hospitals Complex, Ile-Ife.*

***Department of Orthopaedic Surgery, Obafemi Awolowo University Teaching Hospitals Complex, Ile-Ife. ***Charles Salt Centre, United Kingdom.*

Background: Information on renal bone disease (RBD) is sparse in Nigeria. The prevalence in dialysis population worldwide ranges between 33 and 67% and it worsens with progression of renal insufficiency. In order to add to the body of knowledge on this disabling complication of CRF we conducted a prospective descriptive study to determine the presence and magnitude of RBD in our end stage renal disease (ESRD) patients.

Methodology: Thirty consecutive ESRD patients were recruited after an informed consent. Those with connective tissue disease or on steroid therapy were excluded. They had thorough clinical evaluation and investigations were ordered which included serum calcium, phosphate, alkaline phosphatase, albumin and skeletal survey. The serum iPTH, osteocalcin and 1.25 Di (OH) Vit D₃ were assessed in 20 patients. Data was analysed using SPSS package version 10.

Results: Their age range was 18-72 years (Mean \pm SD; 38.93 \pm 15.73), there was a male preponderance with 24 (80%). Uraemic symptoms were the major presenting complaints. None of the patients complain of bone pain or fracture. The mean values for serum creatinine, urea, creatinine clearance, calcium, phosphate, albumin, alkaline phosphatase, iPTH, osteocalcin and 1.25 (OH)₂ Vit D₃ were 1478.96 \pm 771.12 mol/L, 22.33 \pm 7.42 mmol/L, 3.38 \pm 2.22 mls/min, 1.8 \pm 0.5 mmol/L, 1.61 \pm 0.65 mmol/L, 30.2 \pm 6.1 g/L, 124.33 \pm 63.37 IU/L, 22.66 \pm 24.72, 45.14 \pm 43.8, 37.7 \pm 22.3 respectively. There was hypocalcaemia and hyperphosphataemia in 80% and 60% of the patients respectively. Alkaline phosphatase was elevated in 44% of the patients while only 11.8% had hyperparathyroidism. 1.25 (OH)₂ Vit D₃ was low in 83.3% of the patients. We found a significant negative correlation between serum calcium and iPTH levels ($r=0.915$, $p=0.029$). There was also significant negative correlation between alkaline phosphatase and 1.25 (OH)₂ Vit D₃ and serum albumin. There was radiological evidence of RBD in only 16.7% of the patients.

Conclusion: Renal bone disease is increasingly being recognized in our patients and the commonest RBD seen in this series is low turn over while hyperparathyroid bone disease appears low. Also radiological detection is low.

**THE PREVALENCE AND INTENSITY OF SCHISTOSOMA HAEMATOBIIUM INFECTION
AMONG PRIMARY SCHOOL CHILDREN IN KATAGUM TOWN, BAUCHI STATE,
NORTHERN NIGERIA.**

Belonwu RO, Okoro AB, Nwakoby BAN and Ozumba NA

Introduction: Schistosomiasis is one of the parasitic infections that affect man and it is second to none in prevalence among water borne diseases. The substandard hygienic practices and inadequate sanitary facilities are predisposing factors. Victims of schistosoma haematobium infection present typically with terminal haematuria. The prevalence of infection varies from region to region while intensities varies from person to person depending on level of immunity and degree of water contact activities. Other short term and long term complications may occur.

Methods: The study was carried out among all the primary school children in Katagum central primary school. The children were 444. The prevalence of infection was determined by collecting urine specimens in plastic containers between 10am and 2pm. There after, presence of ova was determined using syringe filtration technique and microscopy. The intensities were recorded as number of ova per 10ml of urine. Furthermore, the detection of proteinuria and haematuria which are indirect measures of intensity was done using Bio scan (a recent strip).

Results: Of the 444 children, 11 had schistosoma haematobium infection (Prevalence of 2.5%). The intensities of infection varied from 3 -1500 oval 10ml of urine. Haematuria was detected in 3 of the 11 positive cases (Prevalence of 27.3%) while proteinuria was detected in 5 of the 11 positive cases (prevalence of 45.5%).

Conclusion: The study has shown again the existence of young population with potentially preventable infection that can lead to severe genitourinary disease. The authors recommend further identification of other endemic foci so that early treatment could be offered.

PREVALENCE OF MACRO-PROTEINURIA IN HIV POSITIVE PATIENTS

*Emem-Chioma P**, Arogundade FA**, Sanusi AA**, Adelusola A**, Wokoma FS*, Okunola OO** and Akinsola A**

**Department of Medicine, UPTH, Port Harcourt, **Renal Unit, Department of Medicine, OAUTHC Ile-Ife.*

Background: HIV/AIDS remains a huge problem in Nigeria and in fact globally. Whereas renal disease, especially HIV associated nephropathy (HIVAN) one of its grave complications has been extensively studied in the developed countries of the world. There remains a paucity of work emanating from Africa, particularly Nigeria .

Aims: To determine the prevalence of proteinuria in our HIV positive patients.

Methodology: One hundred and fifty HIV positive patients were studied. Exclusion criteria included diabetes, hypertension, pregnancy, congestive cardiac failure and urinary tract infection. Their socio-demographic data and clinical findings were obtained and documented. Their early morning urine samples were tested for albuminuria using albu-stix and urine albumin-creatinine ratio was determined for those with proteinuria. Their full blood count (FBC), CD4-count, serum electrolyte, urea, creatinine, serum proteins and total cholesterol were also determined. Renal biopsy was done in those that consented. Data was analyzed using SPSS version 10.

Results: All the 150 patients completed the study and females constituted 58%. A total of 42 patients

(46.7%) had proteinuria. The mean (\pm SD) age was 34.7 (18.82) years while the CD4 ranged - 4 between 120 and 760 cells/g/l, Mean (\pm SD) for serum cholesterol, albumin, urea and creatinine and creatinine clearance were 3.67 (\pm 0.8) mmol/L, 38.1 (\pm 6.6)g/l, 4.37 (\pm 2.21) mmol/L, 104.5 (\pm 36.3) mol/L and 55.16 (138.86) mls.min. Gross proteinuria defined as proteinuria of $> 2+$ was found in 17.2% while 24 hour urine protein ranged between 0.4 and 11.2g/day. Proteinuria was commoner in women (60%), married (48.6%), singles (31.4%) and widowed (12.9%) than divorcees (7.1%). There was also a high prevalence in those with secondary education (42.9%), primary education (34.3%), traders (30%) and artisans (20%). There was no correlation between CD4 count, 24 hour protein and creatinine clearance.

Conclusion: There is a high prevalence of proteinuria amongst our HIV positive patients and the 17.2% of those with proteinuria having gross proteinuria suggest a high prevalence of HIVAN.

RENAL PROFILE IN PATIENTS ON SHORT-TERM#COX-2 INHIBITOR (NIMESULIDE) THERAPY

Arogundade FA, Bello IS**, Adeosun AO*** and Sanusi AA**

**Department of Medicine, Obafemi Awolowo University Teaching Hospitals Complex, Ile-Ife.*

***Department of General Medical Practice, Obafemi Awolowo University Teaching Hospitals Complex, Ile-Ife. ***Department of Chemical Pathology, Obafemi Awolowo University Teaching Hospitals Complex, Ile - Ife.*

Background: Non-steroidal anti-inflammatory drugs are potent analgesics that act by nonspecific inhibition of cyclo-oxygenase (COX) enzyme. They are known to possess protean deleterious renal manifestations. More selective COX-2 inhibitors were developed to reduce the gastrointestinal and renal side effects.

Aim: To find out the renal effects of short-term COX-2 usage.

Materials and Methods: Twenty adult Nigerians with clinical and radiological evidence of osteoarthritis but without history of peptic ulcer disease or allergy to Nimesulide were recruited after an informed consent. They were commenced on Nimesulide 200mg daily for 6 weeks. Analgesic efficacy of the drug was assessed fortnightly using individual patient's rating on visual analogue scale (0.10). They had serum chemistry and 24-hour urine profile before treatment and at completion of the 6 weeks course. Mann-Whitney U test and Wilcoxon signed rank tests for non-parametric data were used to data analysis.

Results: All the patients completed the study. Their ages ranged between 43 and 70 years (Mean \pm SD; 59.15 + 8.04 yrs) and majority of them were females (60%). Their body mass index ranged between 18.78 and 48.83 kg/m² (Mean + SD; 30.001 6.94kg/m²). There was a significant reduction in pain assessment scores between initial score and after 2,4 and 6 weeks with mean \pm SD values of 9.05 + 0.6, 3.0 \pm 1.3, 2.15 \pm 0.88, 2.15 \pm 0.49 respectively (corresponding P - values were < 0.0001 , < 0.0001 , < 0.0001 respectively). Of all the parameters assessed in the serum chemistry, creatinine was found to be significantly lower post treatment (P = 0.005). Urinary uric acid excretion was also found to be significantly higher after COX-2 treatment while the urinary protein, sodium, potassium and creatinine clearance were not found to be different.

Conclusion: Nimesulide has potent analgesic effect with safe renal profile; however, there is need to investigate the cause of increased (uricosuria) urinary uric acid excretion.

PREVALENCE OF ENURESIS AMONG SECONDARY SCHOOL STUDENTS IN PORT HARCOURT, NIGERIA.

*Anochie IC and **Ikpeme EE*

*University of Port Harcourt Teaching Hospital, Port Harcourt
**Braithewaite Memorial Hospital, Port Harcourt.*

Background: Enuresis is a common problem in children. The prevalence is noted to be 10-15% in children above 5 years with a steady fall to 1% in their teens. Nocturnal enuresis is commoner in boys. The problem is associated with stressful environment, and it is distressful to both the sufferer and the patients, with limited response to drug treatment.

Aim: The study was to determine the prevalence and causes of enuresis among students in Port Harcourt.

Subjects and Methods: A survey of junior and senior students from 2 secondary schools in Port Harcourt Local Government area was done using self-administered questionnaire. Information on the age, sex, type of enuresis, causes, treatments given and outcome was sought.

Results: A total of 491 students between the ages of 10-21 years were studied. They were 248 (50.5%) females and 243 (49.5%) males. Nocturnal enuresis (NE) was seen in 124 (25.3%) students; out of which 59(47.6%) was primary NE Secondary type was mainly due to sickness (26.6%) and death in the family (14.5%). 83(66.9%) had intermittent type. NE was significantly more in males than in females $p < 0.05$. Treatments received included local herbs 4(3.2%), alarms 3(2.4%), drugs 10(8.1%), prayers 44(35.6%), waking at night 15(12.1%) and gifts/rewards 4(3.2%). Thirty-five (7.1%) students did not receive any form of treatment.

Conclusion: Enuresis is a common problem among secondary students in Port Harcourt and should be addressed in school health.

AN ASSESSMENT OF AWARENESS LEVEL OF KIDNEY HEALTH IN OBAFEMI AWOLOWO UNIVERSITY (OAU) COMMUNITY

Ojo AA and Ayandiran EO

*Department of Nursing Science, Obafemi Awolowo University, Ile-Ife
E-mail: olufeman@yahoo.com, adearaajo@yahoo.com*

Introduction: The Health status of individuals in any Community depends to a large extent on their level of awareness of factors that militate against their health. Very importantly, the health status of the kidneys had been found to pose a more serious threat to life than even the much-dreaded HIV/AIDS in both urban and rural communities.

Aim: The study therefore examined the level of awareness of kidney health among selected members of staff of O.A.U. Community, Ile-Ife, through multistage sampling technique, to determine any gap in such knowledge as necessary for maintaining health kidneys.

Methods: A self-developed questionnaire whose validity and reliability had been ascertained was administered to selected members over a period of two weeks in offices and retrieved immediately. Descriptive and inferential statistics were used to analyze the data.

Results: Revealed that majority of the respondents had inadequate knowledge about the location and functions of the kidney. Majority also equally displayed inadequate knowledge of the causes, manifestation and prevention of renal diseases.

Conclusion: The study concludes that if an enlightened community like the university demonstrates such level of inadequacy, the situation might be worst in other communities. It therefore recommends aggressive public health education and enlightenment campaigns for the improvement of the renal health of the society.

ATTITUDE OF NIGERIAN PAEDIATRICIANS TOWARDS STRAEGY IN ACUTE PYELONEPHRITIS.

Anochie, I.C. and Eke, FU

Department of Paediatrics, University of Port Harcourt Teaching Hospital (UPTH)

Introduction: Acute pyelonephritis (APN) is a common renal disorder in children. However, delay in the diagnosis and treatment of this condition leads to development of irreversible renal scars in young children. There is still no defined strategy for the investigation and treatment of APN in Nigeria.

Aim: To investigate the attitude of Nigerian Paediatricians toward the management and treatment of children with acute pyelonephritis.

Methodology: Registered paediatricians and resident doctors who attended the 34th Annual General and Scientific Conference of the Paediatrics Association of Nigeria (PANCONF) held in Port Harcourt, Rivers State in January 2003 were given the questionnaires. to identify their current diagnostic and treatment practices for acute pyelonephritis in a 3 year-old girl.

Results: A total of 105 responses were received (30%). All the paediatricians perform urine culture and 85.2% renal biopsy. Of these, eightythree percent was doctors working in tertiary hospitals. The entire paediatric nephrologist would request renal ultrasound in the acute phase of pyelonephritis. Twelve (10.4%) responders requested intravenous pyelography (IVU). Micturating cystourethrography (MCU) and ⁹⁹M Tc-dimercaptosuccinic acid scintigraphy (DMSA) scan were requested by 14% and 36% respectively. Those working in tertiary hospitals perform both the MCU and DMSA less frequently than those working in private/company hospitals (13% vs 8%, 34% vs 41%). The doctors who graduated in the 1990's requested the various imaging procedures more than those that graduated earlier. Immediate treatment was preferred by 96.5%, with cephalosporin being the antibiotic of choice by 47.8% paediatricians. Intravenous route was more favoured than oral route (87.8% vs 12.2%). The use of oral antibiotics is inversely related to the year of obtaining fellowship.

Conclusion: Among Nigerian paediatricians, there are varying attitudes toward the diagnosis and treatment of acute pyelonephritis. This therefore calls for properly documented prospective studies on the management of APN in children.

CHILDHOOD NEPHROTIC SYNDROME AT THE UNIVERSITY OF PORT HARCOURT TEACHING HOSPITAL (UPTH), PORT HARCOURT, NIGERIA.

Anochie IC, Okpere AN and Eke FU

Department of Paediatrics, University of Port Harcourt Teaching Hospital (UPTH)

Background: Nephrotic Syndrome remains the commonest renal disorder seen in children. It is an important cause of childhood morbidity and mortality in developing countries.

Objectives: This study was conducted to determine the pattern of presentation aetiopathogenesis and response to steroid of patients with Nephrotic Syndrome seen at the University of Port Harcourt Teaching Hospital (UPTH).

Subjects and Method: A prospective study of patients with Nephrotic syndrome seen at UPTH from 1989–2004 was done. The information obtained included demographic data, clinical presentations, laboratory investigations, renal ultrasound, treatment and response to steroid therapy. Histopathological reports of the renal biopsies were also obtained.

Results: There were 28 patients seen during the study period but only 20 were followed up. They comprised of 10(%) females and 9(%) males with M:F ratio of 1:1:1. One patient had ambiguous genitalia. The age ranged from 14 years (mean). Ten (%) of the patients were between 1- 4 years. The least age of presentation was 5-9 years. Body swelling was the commonest presenting complaint found in 100% of the patients. The mean urine protein, serum albumin and cholesterol were 2.5g/dl, 17.3g/L and 8.7mmol/L respectively. Three (18.8%) patients had chronic renal failure, with FSGS on renal biopsy in 2 patients. Two (12.5%) patients were seropositive to HIV 1 and 11. Steroid responsiveness was seen in 12(%) patients, 9(%) between 1-4 years and 3(%) above 10 years. All the steroid responders above the age of 10 years were males. Two (%) were steroid resistant. Cyclophosphamide was given to 3 patients who were frequent relapsers. The mortality rate was 15%, and these were patients with CRF and pulmonary oedema.

Conclusion: Nephrotic syndrome is common in our environment. Majority are idiopathic and they respond to steroid therapy.

SERUM ELECTROLYTES, UREA AND CREATININE IN CHILDREN WITH PRIMARY NEPHROTIC SYNDROME AND ACUTE GLOMERULONEPHRITIS

Adedoyin OT, Anigilaje EA, Ologe MO and Adeniyi K

Background: Primary nephrotic syndrome (NS) and acute glomerulonephritis (AGN) are known to cause varying degrees of renal insufficiency depending on the severity. Certain drugs and management strategies used in the treatment of these two disorders also have profound effect on the serum electrolyte and urea profiles.

Objectives: To determine and compare the cumulative effect of the management and interventional strategies on the kidney function in children with NS and AGN.

Methods: The biochemical profiles of children admitted with a diagnosis of NS and AGN between 1996 and 2004 were compiled. All the NS patients had not commenced steroid and cytotoxic agent by the first and second week, while all of them were already on steroid by the fourth week. All the AGN patients were already on diuretics, antibiotics and antihypertensive within the first and second week, while all the drugs had been stopped by the fourth week.

Results: A total of 21 and 16 children with AGN and NS respectively met the study criteria. There was no significant difference in the serum sodium, potassium and urea in both groups during all the period except the fourth week. The prevalence of hypokalemia in both groups of children was low.

Conclusion: The serum sodium and potassium were significantly low compared to those with AGN in the fourth week, while the serum urea and creatinine was higher in NS patients in the same period. There was also generally a low prevalence of hypokalemia throughout the study period.

COMPARATIVE ANALYSIS OF URINARY TRACT INFECTIONS IN CHILDREN WITH PRIMARY NEPHROTIC SYNDROME AND ACUTE GLOMERULONEPHRITIS

Adedoyin OT, Ojuawo IA, Odimayo MS and Anigilaje EA

Background: The occurrence of urinary tract infection (UTI) in children with nephrotic syndrome (NS) has been widely reported by various workers, but not much has been documented about its occurrence among children with acute glomerulonephritis (AGN). Hence the level of susceptibility to UTI by both diseases has not been compared.

Objectives: To determine and compare the prevalence of UTI in newly diagnosed AGN and NS patients.

Methods: The urinary microscopy culture and sensitivity of all children admitted with a diagnosis of NS and AGN between 1996 and 2004 were compared. Children with NS who had a relapse or were commenced on steroid, cytotoxic agent or antibiotic before admission were excluded from the study. Similarly, AGN patients who had been commenced on antibiotics were excluded.

Results: A total of 35 and 32 children diagnosed with AGN and NS respectively met the study criteria. Urinary tract infection occurred in 3(9%) children with AGN and 1(3%) child with NS. The organisms isolated among the AGN patients include coliform, klebsiella and staphylococcus aureus while coliform was isolated in the only NS patient with UTI.

Conclusion: There is a low incidence of UTI in newly diagnosed children with AGN and NS.

THE RELATIONSHIP BETWEEN METABOLIC SYNDROME AND PROGRESSIVE RENAL DISEASE: THE ZANKLI EXPERIENCE

Mbah IO, Amodu PO and Lovett Lawson

Zankli Medical Centre, P. O. Box 7745, Abuja, Nigeria.

Background: Metabolic Syndrome is a cluster of risk factors in coronary artery disease (CAD), which also includes dyslipidemia, hyperglycemia, endothelial dysfunction, fibrinolytic and inflammatory abnormalities, left ventricular hypertrophy, microalbuminuria and increased oxidative stress is also referred to as cardiometabolic syndrome. The components of this syndrome increase the risk of renal disease, cardiovascular disease and mortality. The incidence of end stage renal disease has risen dramatically in the past decade due to the increasing prevalence of metabolic syndrome, and metabolic syndrome patients are scattered in various clinics poorly equipped for effective management.

Objectives: The aims of this study carried out in Zankli Medical Centre, Abuja is to show the prevalence of metabolic syndrome amongst patients attending the medical clinic of the hospital for a period of one year and to examine the relationship between metabolic syndrome in the context of progressive renal disease and accelerated cardiovascular disease and to compare this effect with those brought about by chronic hypertension alone in the absence of metabolic syndrome.

Patients/Methods: The patients were recruited in three ways: direct visits to our clinic, through referrals from other hospitals and through incidental findings of dyslipidemia in the laboratory. The inclusion criteria were hypertension, diabetes, obesity, atherogenic dyslipidemia and age span of 20 to 70 years. Blood samples were collected after 12-14 hours overnight fast for assay of lipids, E & U, creatinine clearance by calculation and FBS etc. Also ECG was done on all the patients.

Results/Conclusions: ZMC screened 409 patients, 25(61.4%) male and 158(38.6%) females: 78(19.1%) had MS. 47(18.7% of 251 or 80.3% of 78) males and 31(19.6% of 158 or 39.7% of 78) females ($p < 0.5$).

Prevalence rate of CRD amongst MS patients is more significant ($p = 0.0013$) than CR1) amongst chronic hypertensives ($p = 0.3955$). However both prevalence rates were quite significant ($p < 0.5$).

HAEMODIALYSIS FOR ENDSTAGE RENAL DISEASE IN HIV SEROPOSITIVE NIGERIANS

Anteyi EA, Liman HM, Sambo J, Effiong B and Olawale D
Renal Unit, National Hospital, Abuja.

Background: The burden of managing patients with Endstage renal disease has been increased by the recent epidemic of HIV infection. In Nigeria, there is still widespread stigmatization of HIV seropositive patients by most Haemodialysis centres across the country. We hereby report the outcome of an initiative in the renal replacement therapy of ESRD in HIV seropositive Nigerians.

Aims and Objectives: To describe our experience in the dialysis of HIV seropositive patients in terms of survival and complications. To determine the feasibility of integrating HIV seropositive patients into the Haemodialysis programme. To compare the dialysis outcome of HIV seropositive patients with sex and age-matched HIV negative patients.

Materials and Methods: We reviewed the medical records of all haemodialysis patients seen between 1st October 2002 and 31 December 2004 (26 months) at the National Hospital, Abuja and a private Haemodialysis centre based in Abuja. The centre agreed to dedicate one of its Surdial Nipro Haemodialysis machines for HIV seropositive patients.

Results: A total of 14 patients with ESRD and HIV seropositive were dialysed at the centres. Femoral, Subclavian and AV Fistula were used as vascular access. The mean duration on Haemodialysis was 70 days (range 1-240 days). One patient was transplanted after 9 months of Haemodialysis. Use of antiretroviral medications was associated with a better outcome. Intradialysis complications and cause of death are similar to HIV seronegative patients. Accidental exposure to blood by Haemodialysis staff was not a problem.

Conclusion: Haemodialysis is a feasible option in the management of HIV seropositive ESRD patients. Survival and quality of life are better than conservative management. Accidental exposure to blood by staff is minimal if standard preventive protocols are observed. More Haemodialysis centres need to be encouraged to offer renal replacement therapy to HIV seropositive patients.

NUTRITIONAL AND FUNCTIONAL STATUS OF A SAMPLE OF CHRONIC RENAL FAILURE PATIENTS

Anteyi EA and Liman HM
Renal Unit, National Hospital, Abuja.

Background: The nutritional status of chronic renal failure patients is an important determinant of the morbidity and mortality associated with the disease. In the absence of a cure for chronic renal failure, one of the major aims of treatment is to improve the quality of life and functional status of affected patients. The nutritional status of affected patients seems to have a positive impact on the functional status of such patients.

Objectives: The study evaluated the baseline nutritional and functional status of a sample of chronic renal failure patients. The predictive factors of malnutrition as well as the relationship between the nutritional status and the functional status of such patients were also assessed.

Materials and Methods: A total of 62 consecutive chronic renal failure patients being treated at the renal unit of National Hospital, Abuja were enrolled into the study. Nutritional status was assessed by the use of Subjective Global Assessment (SGA), a tested and verified nutrition assessment tool. Other objective nutritional parameters used include weight change over six months of follow up, Body Mass Index, Triceps Skin fold thickness, Mid upper arm circumference and Serum Albumin. Average daily protein intake was estimated using a three-day food diary. The functional status was assessed using a modified Karnofsky Index Score. Data obtained were analyzed using the EPIINFO 6.04 integrated statistical software for health and epidemiological research.

Results: Malnutrition was seen in more than 53 of the patients studied based on SGA criteria. The serum albumin underestimated patients with malnutrition when compared to the SGA. The average daily protein intake of malnourished patients were lower than the well-nourished group. Loss of appetite, vomiting and poverty appeared to be the most important factors contributing to malnutrition. The overall Kamofsky scores were lower for the malnourished patients.

Conclusion: The incidence of malnutrition in our chronic renal failure patients is high. The functional status of the malnourished patients is also poorer than that of the well-nourished group. Loss of appetite, vomiting, poverty and reduced daily protein intake are important contributing factors to malnutrition. Efforts at detecting early malnutrition, as well as correcting factors associated with malnutrition in such patients, will hopefully improve their functional status.