Libyan Society of Dialysis - 3rd Annual Conference
Libyan Society of Dialysis Technician - 1st conference
July 2023 - Tripoli, Libya
ABSTRACT BOOK
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I. **Acknowledgements – Conference support**

We would like to express our appreciation for the valuable support of our sponsors in the 3\textsuperscript{rd} LSD International Conference and 1\textsuperscript{st} LSDT conference. Sponsors support and involvement are greatly appreciated, and the success would not be possible without the fantastic collaboration we have. Thank you very much.
II. Comities

Badreddin Shaibani  Conference president  Shaibanibadr@gmail.com

Abdul Moneim Al-Shaafi  Vice president  Abdalmnmmkhta63@gmail.com

Scientific program

Khairi Ayad  Chair  Kayad40@gmail.com

Research evaluation

Sabah Elbarasi  Member  Sabah_4102015@yahoo.com
Ali ALahresh  Member  ali_lahresh68@yahoo.com
Omran Bakoush  Member  omran.bakoush@uaeu.ac.ae
III. LSD Scientific programme
Saturday. July 8, 2023

Session 1: 09:15-11:00

Critical Care Dialysis

- Treatment of Sepsis-Associated Acute Kidney injury in the ICU
  *M. Boubashir - Algeria*
- Clinical manifestations and diagnosis of coronary artery disease in dialysis patient
  *F. Jaraya - Tunis*
- Acute cardiorenal syndrome
  *S. Albarasi - Libya*

Session 2 11:30-14:00

Hemodialysis practice

- 50 years of dialysis services, where we stand now
  *K. Ayad - Libya*
- Expanded hemodialysis: the new innovation
  *F. Jaraya - Tunis*
- Parathyroidectomy when it is necessary
  *R. ALLali - Algeria*
- Pulmonary hypertension in chronic kidney diseases patients
  *F. Menesi - Libya*

Session 3 16:00-19:00

- Free communications 1 FC 1-7
- Poster session 1 P01-P8
- How to improve your writing skills and publishing your article (pre-registration)
- Abbott Point of Care Symposium
- Baxter symposium
Sunday. July 9, 2023

Session 1: Hall A  **Peritoneal dialysis**
09:00-11:00

- PD for patient with AKI  
  *M. Essahaty- Libya*
- The new 2022 Peritonitis guidelines recommendations, Trouble shouting case  
  *R. Darwish- Egypt*
- Non-infectious complication of PD  
  *M. Essahaty- Libya*
- PD in Africa, is it the solution?  
  *R. Darwish- Egypt*

Session 1
09:00-11:00  Hall B  **Dialysis Vascular Access**

- Ideal access, can it be possible  
  *K. Ayad- Libya*
- Maturation, Monitoring and Surveillance of vascular access  
  *I. Alzayany- Libya*
- Permcath: indications and insertion related Malpractice  
  *A. Al Ahresh- Libya*
- Managing infection in vascular access  
  *S. Albarasi- Libya*

Session 3
16:00-19:00

- Free communications 2  FC 8-13
- Poster session 2  P 09-P17
- Dialife symposium
- B Braun symposium
### Free communications

#### Session 1  Saturday 08/7/2023 at 16:00-18:00

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<td>Case report (ACRS)</td>
<td>Rodaba.A. Bitrou</td>
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<td>Role of CRRT with oxiris filter in treatment of the anti-phospholipid syndrome</td>
<td>Fatma Rugrug</td>
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<td>How to prevent hemodynamic instability related to renal replacement therapy</td>
<td>Zaynab Alarif</td>
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<td>Maturation, monitoring and surveillance of vascular access</td>
<td>Taiseer Yousef</td>
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<td>Treatment of sepsis-induced AKI in ICU</td>
<td>Amina Gebreel</td>
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<td>6</td>
<td>The challenge of controlling phosphorus in the dialysis patient</td>
<td>Ghada A Elhamed</td>
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#### Session 2  Sunday 09/7/2023 at 16:00-18:00

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<td>Cardio-renal disease</td>
<td>Rabia Barka</td>
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<td>SGL2 in CKD</td>
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<td>9</td>
<td>Indication of CRRT</td>
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<td>Treatment of sepsis induce AKI</td>
<td>Nada Khaled</td>
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<td>11</td>
<td>Volume balance in peritoneal Dialysis</td>
<td>Afaf Alshamly</td>
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<td>Therapeutic approach in sepsis induces AKI in ICU</td>
<td>Amal Alkhuweldi</td>
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<td>Management of hyperphosphatemia in hemodialysis</td>
<td>Faiza Ali Bashir</td>
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### Original research session - posters

**Saturday July 8, 2023**

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<td><em>Badreddin Shaibani</em></td>
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<td>Predicting severe disease and critical illness on at initial diagnosis of COVID-19</td>
<td><em>Bakoush Omran</em></td>
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<td>Dose the modality of renal replacement therapy matter in anemia prevalence among children with ESRD in TMC</td>
<td><em>Sumaya Salem ELamouri</em></td>
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<td>USS patterns of parathyroid gland in chronic hemodialysis children with 2ry hyperparathyrodism</td>
<td><em>Awatef ELbouaishi</em></td>
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<td>Prevalence and risk factors of erythropoiesis stimulating agents’ hyporesponsiveness in chronic hemodialysis patients attending nephrology center Benghazi</td>
<td><em>Mohamed o Ezwaie</em></td>
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<td>Long term clinical outcome of PD patients 10 years</td>
<td><em>Amal Alkhuweldi</em></td>
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<td>Extent of Achieving KDOQI Targets For hemodialysis Adequacy in Libyan dialysis patients: A Multicenter Cross-Sectional Study</td>
<td><em>Khairi Ayad</em></td>
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**Sunday July 9, 2023**

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<tr>
<td>Effect of low protein diet on renal function and metabolic control in patients with microalbuminuria</td>
<td><em>Hana Alshaky</em></td>
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<td>Study of the effect of food intake during hemodialysis session on blood pressure among patients attending hemodialysis unit</td>
<td>Seham A ELgallal</td>
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<td>Child hood nephrotic syndrome–albida medical center (AMC)experience</td>
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<td>The prevalence of thyroid dysfunction among chronic hemodialysis patients in Benghazi Libya</td>
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<td>Prevalence of peripheral vascular disease in Cohort of older chronic kidney disease patients</td>
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<td>Clinical and laboratory profile of patients referred to start dialysis</td>
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<td>Health related quality of life among patients with end stage renal disease undergoing hemodialysis</td>
<td>B. Shaibani, et al</td>
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<tr>
<td>Effect of low protein diet on renal function and metabolic control in patients with micro albuminuria</td>
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<tr>
<td>Acute kidney injury in pediatric intensive care unit Incidence, risk factor and outcome</td>
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IV. LADT Scientific program

July 8, 2023
Session 1: Hall B
09:00-11:00
- AKI & CRRT, dialysis technician perspective
  *Dr. Mohamed Lamin - Libya*
- Plasma Exchange in Critically Ill Patients: Who, When and How
  *Dr. Ali Alahrash - Libya*

Session 2
11:30-14:00 Hall B
- Occupational safety and mental health of the medical staff working in hospitals
  *Zahra abo Salah - Libya*
- Common mistakes inside dialysis units
  *Rawad bin Yousef - Libya*
- Problems and obstacles facing the infection control team in the dialysis departments.
  *Bushra Shaaran - Libya*
- Diabetic Nephropathy
  *Abdullah AlShahoubi
  Muhammad Ashour
  Muhammad Hamed*

Session 3
16:00-18:00 Hall B
- Open discussion
July 9, 2023
Session 1:
09:00-11:00
- Vascular access
  *in conjunction with LSD, Hall A*
- peritoneal dialysis
  *in conjunction with LSD, Hall B*

Session 2
11:30-14:00
Hall B
- An Introduction to Peritoneal Dialysis and The Problems Faced by Doctors and Technicians
  *Haifa Salem - Libya*
- Nursing Care with Permanent Catheters Before and After Hemodialysis
  *Fatima Aljetlawy - Libya*
- The Psychological Effects in Patients with Chronic Renal Failure.
  *Zainab AlMaimouni - Libya*
- Speech by the President of the Libyan Association of Dialysis Technicians
  *Abdul Moneim Al-Shaafi - Libya*

Session 3
16:00-18:00
Hall B
- Open discussion
V. Abstracts

P-01
COVID-19 infection in Libyan chronic hemodialysis patients: Prevalence, risk factors, severity and predictors of mortality

Badreddin Shaibani $^{1,3}$, Sabah M. Albarasi $^{2,4}$, Rodaba A. Bitrou $^{1,3}$, Jamal W. Gebreel $^{2,4}$, Hajir S. Ahmed$^{1}$

$^{1}$Azzawiyah kidney hospital-Zawia, $^{2}$Alhawari nephrology center-Benghazi. $^{3}$University of Zawia, Faculty of medicine, $^{4}$University of Benghazi, Faculty of medicine, Libya

ABSTRACT

Background: Chronic kidney disease (CKD) is associated with the increased risk of both outpatient and inpatient pneumonia. This association is independent of comorbid diabetes, cardio-vascular disease (CVD), asthma, and chronic obstructive airway disease. Dialysis patients are considered at risk groups for SARS-CoV-2 infection; Short-term mortality in patients on chronic hemodialysis who were hospitalized with COVID-19 was high. Outcomes in those requiring intensive care unit (ICU) and mechanical ventilation management were poor.

Aim: This study mainly aimed to identify the prevalence, risk factors, severity and predictors of mortality in Libyan hemodialysis patients infected with COVID-19.

Methods: In this retrospective cohort study, data of CKD patients on maintenance hemodialysis diagnosed with COVID-19 infection from two large dialysis centers in Libya were collected and analyzed using SPSS version 22 for demographic, clinical and laboratory profiles.
Results: The data obtained from 280 patients from two hemodialysis centers in Libya were analyzed. The infection rate was 10.2 % (83/810 patients), and the overall mortality was 26.5% (22/83 patients). Median age of patients was 51 years (IQR, 42.5, 63.5). Clinical symptoms at presentation were; fever in 80%, dry cough in 80.4%, flu-like symptoms in 73% and anorexia in 50%. (42/83) 51.2% of patients were dyspneic at presentation. The baseline radiological examination was suggestive of COVID-19 infection as it showed bilateral infiltrates in chest X-ray (CXR) and CT-scan (67% and 86.7% of the patients respectively). Detailed radiological examinations showed pleural effusion in 24.4% of cases while consolidations were seen in 39%. CT scan showed the usual ground-glass opacities in 83% of patients and were extensive and bilateral in 26.5% of patients. (39/83) 47% of patients needed admission to ICU for supportive mechanical ventilation (SPO2 ranged from 76-92%). The biochemical and laboratory data, showed a decreased mean absolute lymphocyte count, a high neutrophil-lymphocyte ratio (NLR), and a mild decrease in platelet counts. C-reactive protein (CRP), fibrinogen, ferritin, and D-dimer were also high at admission. 47% (39/83) of patients needed admission to ICU for supportive mechanical ventilation as their SPO2 ranged from 76-92% (22/83 26.5%) of total patients, and (17/39, 43.6%) of ICU patients died in less than 28 days after COVID-19 diagnosis.

Conclusions: In CKD patients on maintenance hemodialysis diagnosed with COVID-19 infection; severity of disease at presentation, need for invasive supportive mechanical ventilation, older age, raised serum glutamic oxaloacetic transaminase, and lower level of albumin may have been valuable predictors of mortality and poor outcomes.

*Correspondence to: shaibanibadr@gmail.com*
P-02

Predicting severe disease and critical illness on initial diagnosis of COVID-19: Simple triage tools
Lutfi Ali S Kurban¹, Sharina AlDhaheri², Abdulbaset Elkkari², Ramzi Khashkhusha², Shaikha AlEissaee², Amna AlZaabi², Mohamed Ismail², Omran Bakoush³.

¹Department of Radiology, Tawam Hospital, Al Ain, UAE; ²Department of Internal Medicine, Tawam Hospital, Al Ain, UAE; ³Department of Internal Medicine, College of Medicine and Health Sciences, United Arab Emirates University, Al Ain, UAE

Abstract
Rationale
This study was conducted to develop, validate and compare prediction models for severe disease and critical illness among symptomatic patients with confirmed COVID-19.
Methods
For development cohort, 433 symptomatic patients diagnosed with COVID-19 between April 15th 2020 and June 30th, 2020 presented to Tawam Public Hospital, Abu Dhabi, United Arab Emirates were included in this study. Our cohort included both severe and non-severe patients as all cases were admitted for purpose of isolation as per hospital policy. We examined 19 potential predictors of severe disease and critical illness that were recorded at the time of initial assessment. Univariate and multivariate logistic regression analyses were used to construct predictive models. Discrimination was assessed by the area under the receiver operating characteristic curve (AUC). Calibration and goodness of fit of the models were assessed. A cohort of 213 patients assessed at another public hospital in the country during the same period was used to validate the models.
Results
186 patients were classified as severe while the remaining 247 were categorized as non-severe. For prediction of progression to severe disease, the three independent predictive factors were age, serum lactate dehydrogenase (LDH) and serum albumin (ALA model). For progression to critical illness, the four independent predictive factors were age, serum LDH, kidney function (eGFR) and serum albumin (ALKA model). The AUC for the ALA and ALKA models were 0.88 (95% CI, 0.86–0.89) and 0.85 (95% CI, 0.83–0.86) respectively. Calibration of the two models showed good fit and the validation cohort showed excellent discrimination, with an AUC of 0.91 (95% CI, 0.83–0.99) for the ALA model and 0.89 (95% CI, 0.80–0.99) for the ALKA model. A free web-based risk calculator was developed.

Conclusions
The ALA and ALKA predictive models were developed and validated based on simple, readily available clinical and laboratory tests assessed at presentation. These models may help frontline clinicians to triage patients for admission or discharge, as well as for early identification of patients at risk of developing critical illness.

*Correspondence to: Omran Bakoush, omran.bakoush@uae.ac.ae
Does the Modality of Renal Replacement Therapy Matter in Anemia Prevalence among Children with ESRD in Tripoli University Hospital?

Sumaya S. Elamour, Amal Elkhwaldi, Afaf Elshamli, Awatif Elbuashi

Tripoli University Hospital

ABSTRACT

Background: End-Stage Renal Disease (ESRD) is a major health problem with increasing prevalence worldwide. Anemia is one of the major complications of this disease.

Aim: To see, whether the modality of renal replacement therapy (RRT) affect the anemia prevalence in children with ESRD.

Methodology: descriptive, hospital-based study was conducted using the hospital records of 50 child attending the nephrology department in Tripoli University Hospital during April 2023. Data include demographic characters and biochemical data collected using predesigned questionnaire. The patients were divided according to the modality of their RRT to peritoneal dialysis (PD) and hemodialysis (HD) groups. The data were analyzed using SPSS version 25.

Results: The mean age of the total studied children was 10.12 (±5.2) years, with equal sex distribution; male to female ratio was 1:1. The commonest age group was between 5 – 12 years (38%) and, the mean hemoglobin (Hgb) level was 9.95 (±2.0). Overall; the anemia was highly prevalent among the studied patients, as well in the subdivided groups (PD and HD) (72% in each). Severe anemia with hemoglobin less than 9 g/dl was little bit high in HD group (32%) as compared with PD group (28%) but this different was not statistically significant.

Conclusion: The modality of RRT, neither the peritoneal nor the hemodialysis, has no significant impact on anemia prevalence among the studied children while there is significant correlation between the age of the child and the anemia prevalence in the present study.
ULTRASOUND PATTERNS OF PARATHYROID GLANDS IN CHRONIC HEMODIALYSED CHILDREN WITH SECONDARY HYPERPARATHYROIDISM

Awatef Elbouaishi¹, Nermen Najjar¹, Mosbah Elsagiar², Afaf AlShamly¹, Amal Alkheldy¹, Somia Alamory¹, Soad Abodraa¹. Fathia Alfasal ¹.

1 Pediatric nephrology and dialysis department, Tripoli university hospital; 2 Nuclear medicine department, Tripoli university hospital

ABSTRACT

Background: Secondary hyperparathyroidism is an important complication in pediatric patients with chronic kidney disease (CKD), it is associated with mineral bone disorders complications due to a decrease in glomerular filtration rate and abnormalities in phosphorus, calcium, parathyroid hormone, and vitamin D metabolism rates, the increase in parathormone synthesis may result in development of adenomas in the parathyroid gland.

Aim of study: To assess the parathyroid gland in children with secondary hyperparathyroidism due to end stage chronic kidney disease (CKD stage 5) on hemodialysis using ultrasonography and determine the relationships between the biochemical variables of the studied sample and radiological changes of parathyroid gland.

Patients & methods: The study was cross sectional prospectively study on Twenty-three pediatric patients follow up at the hospital with a diagnosis of CKD stage 5 on hemodialysis of the age between 3 years to
17 years. The data were collected from the patients’ files at Tripoli University Hospital. The patients were evaluated clinically and in terms of laboratory analyses included calcium, phosphorus, and alkaline phosphatase, vitamin D, and parathormone levels. All the patients were evaluated using strain ultrasonography (USG) except one patient whom removed surgically the parathyroid gland. Dual-energy X-ray scanning for bone was also performed to diagnosis the presence of mineral bone disease.

**Results:** The mean and standard deviation of age of all the studied group was 11.74±4.092 years, with a range from 3 to <18 years old. The obtained statistical results showed the mean values of PTH of the pediatric patients without parathyroid hyperplasia /adenoma (group 1) and with parathyroid hyperplasia /adenoma (group 2) were 710.12±434.13 and 1231±1186.90 mg/mL, respectively. The mean calcium level in group 1 was 8.7±1.07 mg/dL and in group 2 was 8.4±1.7 mg/dL. The phosphorous levels in group 1 were 5.35±1.26 mg/dL and in group 2 was 6.43±2.67 mg/dL. The measured alkaline phosphatase in group 1 was determined to be 445.8±289.20 UI/L while in group 2 was 670.17±627.37 UI/L. Among 22 patients, the ultrasound scanning (USG) showed an increase in size of parathyroid gland observed in 6 patients (26, 1%). The ultrasound images showed also two patients displayed small hypoechogenic lesions in thyoidal gland exactly, 11 patients had bone deformity and 5 patients with history of bone fracture. When comparing the patients with and without parathyroid hyperplasia /adenoma, no statistically significant difference was observed between the analyzed clinical and laboratory variables.

**Conclusion:** Study participants across all stages of their disease reported varying levels of biochemical characteristics. Conducted radiological scanning (USG and dual X-ray) provided relative accurate information for diagnosis and managements. Clinically quiet nature of this disease indicates that the early screening of the patient is the best way to alter the course of the disease.
Key words: Hemodialysis, Children, hyperparathyroidism, parathyroid, ultrasound.

*Correspondence to: Awatef Elbouaishi mobile: +2180925611229, E-mail: dr.awatefsalem@gmail.com

P- 05
Prevalence of Peripheral Vascular Disease in a Cohort of Elderly Chronic Kidney Disease Patients

Ola Adli Al-Obaidi¹, Suzan Abou-Raya², Sameh Elsaid³, Mohamed Elfaqui⁴, Mohamed Arafa⁵

¹MD in Internal Medicine-Alexandria University, Nephrology Specialist-Benghazi Nephro-center, 2Alexandria University, Faculty of Medicine, Internal Medicine, Alexandria Egypt, 3Alexandria University, Faculty of Medicine, Vascular Surgery, Alexandria Egypt 4Alexandria University, Faculty of Medicine, Cardiology, Alexandria Egypt 5Alexandria University, Faculty of Medicine, Internal Medicine, Alexandria Egypt

ABSTRACT
Background and Aims: Both peripheral arterial disease (PAD) and chronic kidney disease (CKD) are prevalent in the general population, especially in older patients. Cardiovascular disease is a major source of morbidity and mortality for patients with CKD. PAD is a strong predictor of coronary artery disease and a risk factor for mortality in the general population. Accordingly, the purpose of this study was to describe the prevalence of PAD and associated cardiovascular comorbidity in older patients with CKD.
**Methods:** We enrolled 100 patients (57 males and 43 females), of mean age 70.2 (±6.4) years diagnosed with CKD stage 3 or above. Demographic data including disease duration, smoking status, comorbidities was collected. All participants underwent a complete geriatric assessment (CGA). Prevalence of PAD was estimated by measuring the ankle-brachial index (ABI). Patients with an ABI <0.9 were said to have PAD.

**Results:** The prevalence of PAD was 33%. Hypertension, diabetes mellitus, dyslipidaemia, coronary artery disease and smoking was present 67%, 59%, 57%, 40%, and 31% of the patients respectively. Patients with PAD were more likely to be older, have hypertension, diabetes mellitus, be smokers, have a higher albumin/creatinine ratio and C-reactive protein compared to the non-PAD patients. 32% had grade 3, 30% had grade 4 and 38% had grade 5 CKD. Intermittent claudication and ischaemic ECG changes were significantly more in the PAD as compared to the non-PAD cases

**Conclusion:** These findings indicate PAD is frequent in older patients with CKD and that patients with both diseases have a higher risk for complications

**Key words:** chronic kidney disease (CKD) Peripheral arterial disease (PAD) Ankle-brachial index (ABI) Intermittent claudication

*Correspondence to:* Email: dr.olaadli@gmail.com
Long-term clinical outcomes of PD patients 10 years Experience of tertiary center from Libya.

Amal Alkhuwaylidi, Soad Abu Draa, Awatif Alboueashi, Afaf Alshamli, Somia Alamori

department of pediatric nephrology and dialysis, Tripoli university hospital Tripoli, Libya

Abstract

Background:
Technique failure (TF) remains a barrier toward increase peritoneal dialysis utilization, Technique failure associated with considerable cost, morbidity and reduce quality of life, identify the causes and patient at risk will improve technique survival.

Aim and Methods: retrospective cohort study done on 60 patients on Peritoneal dialysis for chronic kidney disease during the last 10 years from January 2012 – until December 2022, The patients were on follow up during the study period, demographic, morbidity, and treatment related variables and patients reported data were collected over the study course, The primary outcomes are all causes of peritoneal dialysis failure.

Result: Out of 60 cases 27 patients (45%) had no technique failure what so ever during study period ,55% of cases had technical failure, the causes of technical failure include Peritonitis: is the most common complications in our children occurred in 17 cases out of 60 (28%), followed by catheter problem in 9 cases (15 %),Membrane failure in 5 cases( 8.3%) ,Family satisfaction in 2 cases( 3.3%) .31% of cases doing well at the end of study compared with 69 % multiple outcomes : 13( 21.7%) change to HD 11 (18.3%) had kidney transplant 9 (15%) recovered 8 cases( 13.3%) died 4 of them the cause related to peritoneal dialysis.
Conclusion: peritoneal dialysis remains the most common renal replacement therapy in children, the technique survival is a core outcome for peritoneal dialysis, peritonitis, membrane failure, catheter problem were important causes for technique failure, in our study shows peritonitis is most common cause of dropout patients, which carrying high morbidity and mortality rate. In addition, we notice socioeconomic state, level of education of caregivers play rule in episodes of peritonitis, improve a septic technique and training program will improve outcome.

Key words: peritoneal dialysis, peritonitis, technical failure.

*Correspondence to: amal_abdelkarem@yahoo.com, 0925433223

P-07

Extent of Achieving KDOQI Targets For hemodialysis Adequacy in Libyan dialysis patients: A Multicenter Cross-Sectional Study

Khairi Ayad¹, Badreddin Shaibani², Zaynab Rahouma¹, Marwa Elmelowdi², Ibrahim M. Abualqumsaan³, Amina Smaida⁴, Faraj A. Tamtum⁵, Huda Salama⁶, Malak M. Alborki⁶, Mohamed Aboalgasem⁷, Asma Mahmoud⁸, Asma S. Alhabry⁹, Najah Asbak¹⁰, Hana A. Bobaker¹⁰

1 Nephrology Department, Sabratha teaching hospital, Sabratha ;2 Hemodialysis department, AZ zawiyah Kidney hospital, Az-zawiyah; 3 Dialysis Department, Surman General Hospital, Surman; 4 Hemodialysis department, Agelat Hospital, Al Agelat ;5Alkhoms Kidney Services Center, Alkhoms;6 Misrata Nephrology Center, Misrata; 7Nephrology Department, Ibn Sina Teaching Hospital, Sirt; 8Hemodialysis Department, Almagrif Hospital, Ajdabia;9Alhawari Nephrology Center, Benghazi;10Nephrology Department, Tobrouk Medical Center, Tobrouk
ABSTRACT
Dialysis is essential to maintain the lives of end stage renal disease patients (ESRD). Adequacy of haemodialysis is essential as it can improve patient’s survival, quality of life and biochemical outcome. This study aimed to evaluate the extent of achieving Kidney Disease Outcomes Quality Initiative (KDOQI) targets for dialysis adequacy, haemoglobin level, mineral bone disorders and nutritional status among Hemodialysis patients.

Patients and method: This study was carried out on 286 regular haemodialysis adult patients from eleven Haemodialysis Centers in Libya. Patients subjected to BMI calculations. Blood samples collected for complete blood count, serum albumin, blood urea pre and post dialysis session, serum creatinine, total serum calcium, serum phosphate, serum alkaline phosphatase, C reactive protein, and serum iPTH levels. Targets measures based on the KDOQI Clinical Practice Guidelines.

Result: Mean Kt/V was 1.31±0.40. only 174 (60.84%) patients had adequate dialysis dose (Kt/V>1.2). Mean iPTH was 490.08±694.7. According to the KDOQI, guideline 19.2% of the patients was within the target range for parathormone level. 26.92 % of studied patients had a haemoglobin level of 11gm/dl or more. Mean serum albumin is 3.81±0.64, hypoalbuminemia (albumin <3.5g/dl) was in 27.98% of studied patients.

Conclusion: 39.16% of the studied patients didn’t achieve the KDOQI target dose for adequate clearance, 73.08% didn’t achieve the target haemoglobin level. According to KDOQI guidelines for CKD-MBD, only 19.2% of the studied patients were within the target range for parathyroid hormone level. According to BMI as nutritional markers,
14.0% of studied patients were underweight and 27.98% were with serum albumin below (3.5 g/dl).

Key words: Hemodialysis, hemodialysis adequacy, CKD-MBD, anemia, malnutrition in dialysis patients

*Correspondence to: Khairi Ayad, Department of Medicine. University of Zawia, Sabratha Teaching Hospital. Email: kayad40@gmail.com

P-08
Childhood nephrotic syndrome—Albida medical center (AMC) Experience (2005-2016)
Rema Salih, Mabrouka Bofarraj.

Department of Pediatrics, Faculty of Medicine, Omar Al Mukhtar University, Al-Bieda- Libya.

Abstract

Objectives: To review the disease course in patients with idiopathic nephrotic syndrome and the factors that determine outcome.

Method And Material: case series analytical study Retrospective study with concurrent data collection.

Setting: Pediatric nephrology clinic at –Albida medical center.

Participants/patients: All patients with INS evaluated between 2005 and 2016. The patients with at least 1-yr follow up, were categorized as group I (non relapse no= 46 (39%) and group II (relapses no=72 (61%) which divided into two subgroups: group A FRNS/DSNS n=35 and group B IFNS n=37). Details on complications and therapy were recorded.

Results: Records of 118 children having INS were studied, 74 (62.7% boys) and 44 [37.2% girls. Age group was classified into group1 (2- 8 years) represent (82%) and group 2 (< 2 yr or >8yr) were represent
(18%). Initial steroid resistance (SRNS) was noted in 4 patients (3.38%) and 114 patient (96.6%) were sensitive (SSNS). There was no significance difference between group I and group II in the following parameters: age group, sex, family history, initial hypertension and Hematuria and p value (>0.05). Mean proteinuria was significantly higher in group II (p 0.001), while mean s. albumin, mean s. cholesterol and mean blood urea did not show any significant difference statistically and p value (0.022), (0.012), (0.116) respectively. Group B showed significant higher frequency than group A regarding males (p=0.010), age group 1 and positive family history (p=0.050), both groups were comparable regarding gross Hematuria and hypertension (p=0.975). Mean s albumin was significantly low in group A (p = 0.03) but no significance difference between both group regarding mean proteinuria. All patients had received first line adequate initial therapy with oral prednisolone for 8 weeks. Almost one-half of the patients (54%) was required alternative medications for frequent relapses conforming to national guidelines. The most common complication was hypocalcemia, cushingoid faces and obesity represent (26.2%), (25.4%) (18.6 %) respectively, followed by infections (13.5%), hypertension (11.8%), hypocalcemia (11%), acute renal failure (8.4%), CRF (1.7%) and death in one patient (0.8%).

**Conclusions:** A high proportion of patients with SSNS show infrequent and frequent relapses; early age at onset was the main risk factor. The presence of co morbidities was associated with longer hospital length of stay of frequent relapses patients and increased risk of serious disease complications.

**Key words:** Nephrotic syndrome, Children, Relapse, Resistant, Steroid Chemotherapy

*Correspondence to:* Mabrouka Bofarraj, mobile 0927445625 - Email Mabrouka.bofarraj@omu.edu.ly.
ABSTRACT

Objectives: To analyze the effects of H. Pylori eradication on proteinuria.

Design: Case series prospective study.

Participant patients and method: Fifty-seven children confirmed by clinical and laboratory data with idiopathic nephrotic syndrome followed at nephrology clinic at Albida hospital (2006-2016) recruited in this study which was started in first July 2017 for 6 months duration. The presence of H. pylori stool antigen test was investigated. The positive patients with H. pylori infection were administered eradication triple therapy according to the recommended protocol according to Evidence-based Guidelines. Baseline Parameters levels were tested (Total protein S. albumin, and 24 urine collection for protein in addition to stool Ag test) at start period and after 8 weeks of completion of therapy.

Results: The study included 57 patients, 39 were males. In the studied patients we found 56 (98.2%) were steroid sensitive nephrotic syndrome (SSNS). H. pylori was positive in (40.35%) of the patients. The observed data before and after eradication therapy shown statistically significant different in the mean total protein(p=0.012), serum albumin (0.0003), and proteinuria level in 24-hour urine was significantly decreased (p= 0.0006).
Conclusion: The eradication of H. pylori infection successfully reduced proteinuria. Further well designed large, epidemiological studies are needed to identify whether and by which molecular mechanisms H. pylori may play role in pathogenesis of proteinuria.

Key words: Nephrotic syndrome, children, H. pylori guideline, proteinuria.

*Correspondence to: Mabrouka Bofarraj, mobile 0927445625 - Email Mabrouka.bofarraj@omu.edu.ly

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Health-related quality of life among patients with end-stage renal disease undergoing hemodialysis in Libya: A cross-sectional survey

B Shaibni¹, Najat S. Jourmi¹, Malak AlBurki ², Hend heba³, Faiza Ali⁴, Fatimah alhadheeri⁵, Nada ElBibi⁶

1 Azzawiyaha Kidney Hospital, 2 Tripoli Kidney Center, 3 Ghadamis General Hospital, 4 Albyda Medical Center, 5 Sabha Medical Center, 6 Misurata Kidney Center

ABSTRACT

Background: Measurement of kidney disease and quality of life (SHORT FORM (KDQOL-SF™) VERSION 1.3 enables identification of treatment-related side effects of a disease. Such aspects may negatively influence patients’ lives and should be taken into consideration in medical decision-making. In Libya, research from patients with chronic kidney disease is scarce, and it is almost non-existent in patients undergoing hemodialysis.
**We aimed to:** determine quality of life among end-stage renal disease patients undergoing maintenance hemodialysis in Libya and to identify factors associated with HRQOL.

**Methods:** A multi-center, cross-sectional study design has been adopted, which uses a standardized, short-form Kidney disease Quality of Life (KDQOL') questionnaire, of which Arabic Version 1.3 (KDQOL-SF) is developed, and was directed to all patients receiving hemodialysis at five randomly-selected government hospitals/dialysis centers in Libya. The KDQOL-SF™ questionnaire was given to the patient after explaining it and asked to fill it back during the next dialysis session. One fifty-five questionnaires were distributed, 125 were returned. Only very few patients answered the three questions related to sexual activity. Scoring rules given in KDQOL-SF™ user's manual were followed the pre-coded items were transformed into 0-100 scale, with higher score representing better quality of life.

**Results:** Patients undergoing hemodialysis, who were participated in this study, were males (61.56%), 38.4% in the age group 55–65 years (38.4%). The mean age was 60.55 years with standard deviation of 11.77.50.98% of patients have high level of education, and only 10% of patients are getting some kind of insurance coverage. 65.85 % of patients are affected in different degrees of limitations by the burden of kidney disease and hemodialysis on their' daily activity (27.77%%, limited a lot and 38.09 limited), and 54.79 % of patients replied yes to question: During the past 4 weeks, have you had any of the following problems with your work or other regular activities because of your physical health? Which indicates a serious problem limits patients' regular activity and adds burden on family and caregivers. The level of satisfaction towards caregivers varies from patients to patient and it constitutes about 59.2 % ranges from good to the best.

**Conclusion:** Although patients are satisfied of care given, still they show low HRQOL across all subscales compared to other studies.
Therefore, the implementation of guidelines is crucial to improve patients’ care and provide them with health support encourage their adherence to the prescribed therapy. Furthermore, establishing patient support groups involving family, social workers, and caregivers is of a great importance. Social and financial support by the government and work to improve insurance coverage is a crucial if aiming to improve quality of lives in this group of patients

*Correspondence to: shaibanibadr@gmail.com

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Clinical and laboratory profile of patients referred to nephrology centers to start dialysis.
Badreddin Shaibani, Farida M. Lahresh, Asma S. Rezg, Aya Almonir

1 Azzawiyah kidney hospital, 2 Albyda medical center, 3 Sabratha teaching hospital

ABSTRACT
Background
Late referral of CKD patients for nephrologists care remains frequent, around 30%, although it is most often unjustified. Late referral deprives the patient of early implementation of a reno- and cardioprotective therapeutic strategy that reduces cardiovascular comorbidity and mortality. Better coordinated cooperation between family doctors and nephrologists, through the implementation of policies, now appears as the most effective way to improve the care of CKD patients.
Late referral to nephrologists has the risk of the emergency start of dialysis with temporary vascular access and carries a higher risk of mortality. On the other hand, the timely referral to the nephrologist in
the pre-dialysis stage is associated with better survival and reduced mortality in CKD patients.
We aim to identify at what clinical and laboratory status CKD patients are referred to nephrologists by conducting a cross-sectional study at three referral centers.

Results:
Fifty-two patients were referred to three nephrology centers during the period from 01/05/2023 until 15/06/2023, males constitute the large group (32/52, 61.5 %), the predominant age group was 51-70 with 46.4%, diabetes, hypertension were the main underlying disease (34.4% and 40% respectively).

Most of patients 66.7% were educated at university level or above. not graduated 26.7%, and 40 % of patients are not educated at all.
Late referral defined as more than three months since first diagnosed as having CKD, (26%), and longer time (48%) this constitute 74% of late referral, and only 9.5% of patients have AV fistula.
77.7% of patients needed dialysis, as average BUN and creatinine were >250 mg % and >12mg % respectively, and > 25% were overloaded with mean potassium level of 5.7 mmol/dl and Sodium level of 128 mmol/dl. 74.3 % underwent hemodialysis and 4.4 % treated with CRRT. 22.2% of patients were not dialyzed,
Figure 4 shows status of patients after one month of follow-up were 31.4% remained CKD stage 5 with no dialysis, 31.4 % stage 5 on regular dialysis, only 5.9 % of patients recovered and 15.7 % have died.

Discussion:
Old age group of patients, and chronicity of their diseases, are the main contributing factors for late referral to nephrologists, although the educational level is considered another contributing factor but this study showed that it does not affect seeking advice from nephrologists earlier.
Conclusion:
Late referral is still a challenge to nephrologists and is unhealthy to patients. The need to form network of medical specialty groups to implement guidelines for early referral is crucial and mandatory.

*Correspondence to: shaibanibadr@gmail.com

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ACUTE KIDNEY INJURY IN PEDIATRIC INTENSIVE CARE UNIT: INCIDENCE, RISK FACTORS, AND OUTCOME
Awatif Elbouaishi 1, Wedad S. AL Shamis 2*, Fadila E. Algadban 3, Afaf AlShamly 1, Amal Alkheldy 1, Somia Alamory 1

1Pediatric department Faculty of Medicine, Almergab university, Alkomes, Libya, and Department of pediatric Nephrology, Tripoli University hospital, Tripoli, Libya, 2 Resident, Department of Pediatrics Intensive Care Unit, AL Khadra Teaching Hospital, Tripoli, Libya, 3 pediatrics department, Faculty of Medicine, University of Tripoli, Tripoli Libya and Department of Intensive Care Unit, AL Khadra Teaching Hospital, Tripoli, Liby

ABSTRACT
BACKGROUND: Acute kidney injury (AKI) is a common complication in critically ill patients and it is commonly associated with high mortality and morbidity with adverse short and long-term outcomes.
AIM OF THE STUDY: To determine the incidence, risk factors, and outcome of AKI in the Paediatric Intensive Care Unit (PICU).
PATIENTS & METHODS: A retrospective cohort study was performed
at PICU of an AL Khadra Hospital was conducted among 147 admitted patients aged from 29 days to 18 years, during a period between June 2021 and Jan 2022. We apply the kidney disease: Improving Global Outcomes criteria to define acute kidney injury.

**RESULTS:** during this period, AKIs developed in 43 (29.25%) patients, with 16 patients in stage I (37.2%), 14 patients with stage II (32.6%), and 13 patients with stage III (30.2%), older age (6-15 years) were more prone to develop AKI (P = 0.039), Most common aetiologies were Infections, including pneumonia, sepsis, acute gastroenteritis with hypovolemic shock, and UTI accounted for the majority of all infections. While Pneumonia constituted one-third of all infections associated with AKI and was associated with high mortality 54.7%, Major PICU-related risk factors were use of vasoactive drugs (VD), nephrotoxic drugs (ND), and the need for mechanical ventilation (MV) (P ≤ 0.05). Total renal function recovery occurred in 56.3% of cases, partial recovery in 28.1%, and 18.6% of cases did not recover.

**CONCLUSIONS:** development of AKI in ICU is an important risk factor for poor outcomes in critically setting. Prevention is the best method for avoiding AKI, with the early identification and recognition of high-risk patients, KDIGO is a better diagnostic criterion for early detection of AKI and reduction of their morbidity and mortality.

**Keywords:** acute kidney injury; children; risk factors, outcome.

**Correspondence to:** Awatef Elbouaishi mobile: +2180925611229, E-mail: dr.awatefsalem@gmail.com