dialysis in patients with accidental loss of TDC. The technique described herein, avoids the need to select a new venotomy site, improves patient satisfaction by minimizing procedure related discomfort due to alleviating the need to create a new tunnel, and optimizes resources used for the procedure.

No conflict of interest

POS-616

CUTANEOUS MANIFESTATIONS IN HEMODIALYSIS PATIENTS

SHEDHA, BA1, Hajji, M1, Litaiem, N2, Ben Hmida, F1, Barbouch, S1, Ben abdallah, T1
1Charles Nicoles Hospital, medecine A, Tunis, Tunisia, 2Charles nicoles Hospital, dermatology, tunis, Tunisia

Introduction: Cutaneous manifestations in end stage renal disease (ESRD) are polymorphic and diverse. Hemodialysis (HD) patients may suffer from different dermatological manifestations after initiation of dialysis. The aim of our study was to assess the prevalence and characteristics of different cutaneous manifestations in patients on hemodialysis.

Methods: We led a cross sectional investigation of all HD patients in our unit during three months (from July to September 2019). The patients age, gender, medications and present cutaneous symptoms were noted. We performed for each patient a peer review including: a careful history and the details about the onset of skin lesions, the circumstances of their discoveries, triggering factors, their clinical characteristics and evolution. Then we completed a full clinical examination including a specialized mucocutaneous examination. Data were entered and analyzed using SPSS software. Chi-squared test with a level of significance of 0.05 was used for the qualitative variables.

Results: We included 25 patients. They were 15 men and 10 women (sex ratio M/F = 1.5). The mean age was 45 years old (range 27 -78). The mean dialysis duration was 31 months (range 3 - 228). Fourteen patients (56%) suffered from hypertension, five of them were diabetic. Ethylism was observed in 1 patient and smoking in 7 patients (28%). Initial causes of nephropathy were diabetic, vascular and undeterminate in respectively 52%, 32% and 12% of cases. Uremic pruritus was reported in 20 cases (80%). Pruritus was continuous in 7 patients (28%), nocturnal increasing in 17 patients (68%) and diurnal increasing in 1 patients (4%). Xerosis was noted in 1 case (4%), hair loss in 8 cases (32%). Three patients had cutaneous manifestations of bullous dermatoses (4%). Four patients had dyspigmentation (16%). Staphylococcal pustulosis was noted in a patient after jugular catheter placement. Anemia was noted in 10 patients (40%). The mean hemoglobin level was 9 g/l. Hyperphosphoremia was observed in 18 patients (72%). Treatment was prescribed in 14 cases such as antihistamines in 05 cases (20%), emollient preparation in 3 cases (12%), parathyroidectomy for secondary hyperparathyroidism in cases (24%). Diabetes, anemia and hyperphosphoremia were independent risk factors of cutaneous abnormalities with respectively (p=0.04, p=0.008 and p=0.01).

Conclusions: Skin disorders are frequently the subject of patients’ complaints. Factors such as diagnostic accuracy, climate, and early treatment are all required to decrease the morbidity and mortality of dermatological disorders in ESRD patients and improve their quality of life.

No conflict of interest

POS-617

GERIATIC HEMODIALYSIS PATIENTS: PREVALENCE AND RISK FACTORS

SHEDHA, BA1, Hajji, M1, Barbouch, S1, Ben Hmida, F1, Ben abdallah, T1
1Charles Nicoles Hospital, Medecine A, Tunis, Tunisia

Introduction: The elderly dialysis population has grown in hemodialysis (HD) population over the years and mortality is higher in this group of patients. The purpose of this study was to evaluate quality of life, course of hemodialysis sessions and mortality in elderly patients undergoing HD.

Methods: This retrospective cohort study enrolled 21 patients (10 male and 11 female with a sex ratio = 1.5) who were started on hemodialysis between 2001 and 2019. Data collected included demographics, Clinical Status, vascular access type, and metabolic parameters. All the patients included in this study gave their consent. Data were entered and analyzed using SPSS software. Chi-squared test with a level of significance of 0.05 was used for the qualitative variables.

Results: In this elderly patient’s sample, the average sample age was 68 years; with age ranging between 63 years and 80 years. The mean duration of dialysis was 51 months; with the duration ranging between 1 month to 240 months. The average number of hemodialysis sessions per week was 2 sessions and the session length was three hours and a half. Eleven patients (52.3%) had hypertension, 9 patients (42.8%) had diabetes mellitus and 10 (47.6%) patients had coronary artery disease. The initial nephropathy was diabetic nephropathy, vascular nephropathy and undeterminate nephropathy in respectively 19%, 57% and 23.8% of cases. The mean duration of follow-up was 216 months. During the 18 years study period, 2 patients (4.7%) died. The cause of death was myocardial infarction. Four patients were suffering from dementia 33.3%. Although most patients (68.7%) had arteriovenous fistula. A temporary hemodialysis catheter was the main vascular access initiating dialysis for 33.3% of patients. The hemodialysis sessions were often interrupted and the most common causes were hypoglycemia, hypotension, chest pain in respectively 47.6%, 66.6% and 47.6% of cases. Seven patients (33.3%) had a regular physical activity however, the rest of the patients were completely sedentary. Elderly patients included in this study had difficulty following diet and fluid restriction and the use of emergency hemodialysis was observed in 38% of cases. Anemia, hyperalbuminemia and hyperparathyroidism were noted in respectively 56%, 28% and 34% of cases. Death occurred in 2 cases and the causes were hypotension (p=0.03) and anemia (p=0.002) were independent risk factors of geriatric mortality.

Conclusions: Hemodialysis in elderly patients need an adequate management and special cares.

No conflict of interest

POS-618

INTERMITTENT PNEUMATIC COMPRESSION PROMOTES PRE-SURGERY CEPHALIC VEIN DILATION

Singh, T*1, Mott, S1, Beedon, K1
1 Fist Assist Devices- LLC, Research, Los Altos, United States

Introduction: Arteriovenous fistulas (AVF) are the preferred for hemodialysis access with suitable (2.0-2.5 mm) veins. AVF maturation has been poor globally and often leads to increased catheter contact time and costs. Intermittent compression of upper arm veins may aid in forearm vein dilation pre-surgery to assist in AVF placement and maturation with size expectations.

Methods: This was a prospective, IRB approved trial. A novel intermittent pneumatic compression device [Fist Assist® (FA)] was applied to upper arms below the shoulder to allow cyclic compression of 60 mm Hg four hours daily for 90 days. Sixteen (n=16) Stage 4 chronic renal failure (CRF) patients were in the study arm to test arm cephalic vein dilation. Vein size was measured and recorded at baseline and after 90 days by duplex measurement of the cephalic vein with a tourniquet. Clinical results: vein dilation at particular locations was recorded and tested for significance using a paired-difference t-test.

Results: Sixteen (n=16) mostly African American patients were involved in the first interim evaluation of the device in a USA FACT trial. All patients were in compliance with the study and followed the study protocol. No major complications or adverse effects were noted in any patient except one non-device related rash. Differences were noted with the measurements done with a cuff in the vein sizes in the forearm (FA) and upper arm (UA). Both were significant.

FA3M : 3-Month- Vein diameter (AP), with cuff, at 5 cm from radial bone
UA3M : 3-Month- Vein diameter (AP), with cuff, at 1 cm above elbow
UA : Enrollment-Vein diameter (AP), with cuff, at 1 cm above elbow
FA : Enrollment-Vein diameter (AP), with cuff, at 5 cm from radial bone

Difference between mean of (UA3M-UA) : t = 1.74, p-value = 0.05
Difference between mean of (FA3M-UA) : t = 1.72, p-value = 0.04

For Clinical Effectiveness:
FA: 18% > 2.5 mm and 33% reached 2.0 mm or greater
UA: 44% >2.5mm and 20% reached 3.0 mm or greater