AND STABILITY OFFERED BY ADEQUATE HEMODIALYSIS ALSO EXTENDS TO HAVING A LESSER NUMBER OF MEDICATIONS FOR THEIR ILLNESS, THUS LOWERING FINANCIAL COSTS AS WELL.

Methods: WE CONDUCTED A SMALL SCALE RETROSPECTIVE CHART REVIEW OF END-STAGE RENAL DISEASE (ESRD) PATIENTS ON MAINTENANCE HD IN A PRIVATE TERTIARY HOSPITAL. THE INCLUSION CRITERIA WERE: AGE ≥ 60 Y/O, AT LEAST 3 YEARS ON HD, AND WITH DIABETES AND HYPERTENSION AS CO-MORBIDITIES.

Results: THERE WERE MORE HEMODIALYSIS ASSOCIATED COMPLICATIONS SUCH AS NON-ST ELEVATION MYOCARDIAL INFARCTION (NSTEMI), CONGESTIVE HEART FAILURE (CHF) AND A HIGHER COST OF HOSPITALIZATIONS IN THE INADEQUATE HD PATIENTS VS ADEQUATELY DIALYZED GROUP.

WE CREATED A HYPOTHETICAL ECONOMIC MODEL, USING ASSUMPTIONS BASED ON STUDIES REGARDING HOSPITALIZATION RATES (DUE TO CARDIOVASCULAR COMPLICATIONS) OF ESRD PATIENTS ON INADEQUATE HD (48.3%) AND THOSE ON ADEQUATE HD (35%). WE PERFORMED A COST-ANALYSIS COMPARING THE COST OF HOSPITALIZATION BETWEEN THESE TWO GROUPS USING PHILHEALTH CASE RATES.

The results show that providing adequate HD to ESRD patients will save us P245,700 from complications due to acute myocardial infarction, and P204,100 from congestive heart failure. These amounts offset the computed difference of P171,600 (Table 2) in cost between full coverage and partial coverage.

Conclusions: DUE TO THE HIGH COST OF LONG-TERM HEMODIALYSIS WHICH OUTBALANCES THE BUDGET ALLOCATED FOR HD, A FULL HD COVERAGE FOR LOW-MIDDLE INCOME COUNTRIES SUCH AS THOSE IN BANGLADESH CAN FOLLOW THAT OF MALAYSIA WHICH HAS ADOPTED A MIXED PRIVATE AND PUBLIC MODEL FOR FINANCING HEMODIALYSIS. WITH THE SAVINGS FROM REDUCTION IN HOSPITALIZATION, THE COVERAGE FROM THE PUBLIC SECTOR AND THAT OF NON-PROFIT AGENCIES IS PARTLY FILLED. GOVERNMENT CAN MERGE AN AGREEMENT WITH PRIVATE HD CENTERS TO BE PROVIDERS OF HD INCLUDING EQUIPMENT AND OTHER CONSUMABLES. COMPETITION WILL LOWER THE COST AND STANDARDIZE FEES FOR HD, THUS MAKING IT AFFORDABLE.

MON-058

PREGNANCY IN CHRONIC HEMODIALYSIS PATIENTS : DIAVERUM CASE REPORTS

Helal MD, 1*,1 Moussa, D1, Barhamein, M1, Mitwelli, A1, Babiker, M1, Alghamdi, S1, Alhomrany, M1, AlHarbi, A1
1Diaverum AB, Diaverum AB, Riyadh, Saudi Arabia

Introduction: The outcome of pregnancy in dialysis patients has long been considered to be extremely poor, and the literature concerning pregnancy while on dialysis is rather scarce. This study investigated the incidence and outcome of pregnancy in patients on chronic dialysis over the past 5 years.

Methods: Retrospective and descriptive study, with chart review of all pregnancies undergoing dialysis that were followed-up at our centers from 2013 to 2018. There were a total of 4189 patients in the centers, 400 of whom were females of child bearing age (18 to 44 years). Out of the 400 females of the childbearing age, only 168 were married. Data on the incidence and outcomes of pregnancy in dialysis patients were collected.

Results: Over a period of 5 years, we observed 16 pregnancies in 15 women, with an incidence of 5.13% patient-years. The average age of patients was 33.12 ± 4.6 years. 11 women were undergoing hemodialysis and 5 were undergoing hemodiafiltration. We modified the prescription of dialysis in 13 patients by increasing the frequency of the dialysis sessions to 6 per week in 3 to 5 per week. The average gestational age at delivery was 31.18 ± 6.4 weeks except for one patient still pregnant with twin at 22 weeks. 11 delivered live births. There was 1 intrauterine fetal death, 1 neonatal death, and 2 spontaneous abortion. The overall rate of successful pregnancy was 69%. Low birth weight was observed in 8 cases, and cesarean section was performed in 5 women and spontaneous vaginal delivery in 10 women. The mean pre dialysis of urea, serum creatinine and hemoglobin were respectively 16.2 ± 12.6 mmol/l, 5.5 ± 2.1 mg/dl and 105.8 ± 9.3 g/l at delivery.

Conclusions: Our findings confirm the remarkable improvement of incidence and prognosis of pregnancy in dialysis patients in recent years.

MON-059

RECOVERY OF RENAL FUNCTION IN DIALYSIS AT OUTSOURCING CENTERS

Helal MD, 1*,1 Dujanah, M1, Hassan, E1, Salah, A1, Alghamdi, S1, Alhomrany, M1, Alharbi, A1
1Diaverum AB, Diaverum AB, Riyadh, Saudi Arabia

Introduction: Outsourcing of chronic hemodialysis services is a new practice in the gulf region. Renal function recovery (RFR) from chronic dialysis status occurs at a low frequency, however there is no data in outsourcing centers. The aim of this study was to review all cases of recovery of renal function in all the outsourced clinics and highlight this issue of possible recovery and to give a near accurate estimation to the incidence.

Methods: It is a retrospective chart review of 4189 patients who initiated chronic hemodialysis from September 2013 to September 2018 (5 years-study).

Results: Eighteen patients (0.4%) recovered their renal function correspond to the incidence of 2.475 per 1000 patient-years. 83% of the RFR events occurred in the first 6 months of dialysis initiation. The group consisted of 7 (39%) males and 11 (61%) females. Patients were 63.6 ± 11.1 years old. The primary disease was diabetic nephropathy in 11 out of the 18 cases, vascular nephropathy in 3/18 cases, glomerulonephritis in 2/18 cases and unknown nephropathy in 2/18 cases. Dialysis was initiated due to uremic symptoms in 8 patients, fluid overload in 5 patients, metabolic acidosis in 3 patients, and hyperkalemia in 2 patients. Median dialysis duration was 2 (1 to 19) months. The mean urine output at dialysis initiation was 1.6 ± 0.5 l/day. Their mean initiation creatinine and BUN levels were 304.4 ± 113 µmol/l and 16.6 ± 9 mmol/l, respectively. The mean creatinine and BUN levels at dialysis cessation were 186.7 ± 74 µmol/l and 15.6 ± 11 mmol/l, respectively, while the mean creatinine clearance calculated by 24-hour urine collection was 39.6 ± 24 ml/min. Upon discontinuation, they remained dialysis free for 6.2 ± 5 months.

Conclusions: It is important to be aware of the possibility of RFR in some chronic dialysis patients in outsourcing dialysis centers, because continuity of care by referring nephrologist has been interrupted and the diagnosis of end-stage kidney disease was not finalized.

MON-060

A SNAPSHOT OF DIALYSIS UPTAKE: THE FEASIBILITY OF INCREMENTAL HAEMODIALYSIS INITIATION

JAHAN, S1*, Wolley, M1
1Royal Brisbane and Women’s Hospital, Kidney Health Service, Brisbane, Australia

Introduction: Most haemodialysis (HD) patients are conventionally prescribed a thrice weekly schedule at initiation. An incremental approach to dialysis initiation (i.e. starting at 1-2/week and increasing as needed) may offer potential benefits including preservation of residual renal function, preservation of fistula and reduced costs. In preparation for a prospective study, we examined a cohort of patients who commenced HD in 2017 at our institution and extrapolated demographic and biochemical data.

Methods: All incident patients who commenced HD in 2017 were included.
Results: A total of 39 patients were analysed. 13/39 (33%) were female. Age range was between 31 and 84 with a median age of 58 years. The cause of end stage kidney disease was diabetic nephropathy in the majority of patients (46%). The second commonest cause was autosomal dominant polycystic kidney disease (15%). Other causes were hypertensive nephropathy, glomerulonephritis, renal cell carcinoma, multiple myeloma, cardiorenal syndrome and congenital disease. 54% of the group had diabetes as a co-morbidity that did not always lead to diabetic nephropathy.

7/39 (18%) patients commencing HD in 2017 had a twice weekly initiation. Out of these 7 patients, 3 were a planned start via a well-developed fistula. 2 patients commenced dialysis via a tunneled catheter and the remaining two were commenced using temporary internal jugular catheters.

The following table compares characteristics between the cohort of patients started on twice weekly vs thrice weekly HD.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Twice Weekly HD</th>
<th>Thrice Weekly HD</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of patients</td>
<td>37</td>
<td>32</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>57%</td>
<td>28%</td>
<td></td>
</tr>
<tr>
<td>Median age (y)</td>
<td>69</td>
<td>58</td>
<td></td>
</tr>
<tr>
<td>eGFR at initiation of HD (ml/min/1.73m²)</td>
<td>39 (10–59)</td>
<td>40 (10–58)</td>
<td>0.35</td>
</tr>
<tr>
<td>Urea at initiation (mmol/L)</td>
<td>30.5 (18–57.2)</td>
<td>31.4 (19–66.5)</td>
<td>0.87</td>
</tr>
<tr>
<td>Potassium at initiation (mmol/L)</td>
<td>4.5 (3.5–5.2)</td>
<td>4.6 (3.1–5.9)</td>
<td>0.54</td>
</tr>
<tr>
<td>Haemoglobin at initiation (g/L)</td>
<td>95 (83–115)</td>
<td>94.5 (64–147)</td>
<td>0.06</td>
</tr>
<tr>
<td>Phosphate at initiation (mmol/L)</td>
<td>1.85 (1.26–2.36)</td>
<td>1.89 (1.07–4.78)</td>
<td>0.63</td>
</tr>
<tr>
<td>Body weight at initiation (kg)</td>
<td>93.6 (69–145.9)</td>
<td>88.75 (69.5–163.9)</td>
<td>0.54</td>
</tr>
<tr>
<td>IDWG at 1-month post HD initiation (kg)</td>
<td>0.58 (0.15–2.08)</td>
<td>1.17 (0.13–1.12)</td>
<td>0.41</td>
</tr>
</tbody>
</table>

Conclusions: 18% of incident HD patients stated dialysis at twice weekly frequency. Patients who start at incremental frequency were on average older, had larger body weight at initiation and lower interdialytic weight gain (IDWG) at one month compared to those who started at three times weekly frequency. Incremental start haemodialysis appears to be a feasible approach in a sizeable portion of incident haemodialysis patients.

MON-061
ASSOCIATION BETWEEN THE RATIO OF SERUM EICOSAPENTAENOIC ACID OR DOCOSAHEXAENOIC ACID TO ARACHIDONIC ACID AND LIFE EXPECTANCY IN HEMODIALYSIS PATIENTS

Kanamori, H*1
1Fukuchiyama City Hospital, The department of nephrology, Fukuchiyama, Japan

Introduction: It is reported that n-3 polyunsaturated fatty acids as represented by eicosapentaenoic acid (EPA) or docosahexaenoic acid (DHA) ameliorates the incidence of cardiovascular disease (CVD) event in population with dyslipidemia and that a higher serum EPA/AA or EPA+DHA/AA ratio, respectively. There was significant positive correlation between age and the three ratios, respectively, however no correlation between clinical histories and the three ratios. On univariate analysis, there was significant positive correlation between age and the three ratios, respectively. Comparing between patients with or without the administration of EPA/DHA-drug product, there was no significant difference in DHA/AA ratio, on the other hand, there was significant difference in EPA/AA ratio (the former: 1.58 vs the latter: 0.49) as well as in EPA+DHA/AA ratio. Hereinafter, the data was investigated on patients with the administration of EPA/DHA-drug product. On univariate analysis, there was significant positive correlation between age and the three ratios, respectively, however no correlation between clinical histories and the three ratios. On logistic regression analysis, there was significant positive correlation between age and EPA/AA or EPA+DHA/AA ratio, respectively. There was significant correlation between three-year life expectancy and the three ratios, respectively.

Conclusion: Our findings suggest that a higher serum EPA/AA and/or DHA/AA ratio is associated with a better life expectancy in hemodialysis patients.

MON-062
ANALYSIS OF OXIDATIVE STRESS IN PATIENTS ON DIALYSIS AND HEMODIALYSIS WITH END-STAGE RENAL DISEASE

Cerrillos Gutierrez, J, LERMA, V*2
1IMSS, Department of Nephrology and Transplants- Specialties Hospital, Guadalajara, Mexico, 2IMSS, Nephrology, Merida, Mexico

Introduction: Cardiovascular disease is the main cause of morbidity and mortality in patients with chronic kidney disease (CKD). Patients with CKD experience a greater state of inflammation and oxidative stress, this contributes to cardiovascular risk. Previous studies have shown that patients on hemodialysis (HD) decrease the biomarkers of oxidative stress. However, it has not yet been possible to determine which of these two therapies - hemodialysis or peritoneal dialysis (PD) is the best to reduce this disturbance. Our work was to evaluate the oxidation by means of the different molecular lines, such as proteins, lipids and genetic material; and to distinguish in which extracorporeal therapy, dialysis or hemodialysis, has more influence on the oxidative state.

Methods: Analytical cross-sectional study including 102 patients with terminal CKD diagnosed at the National Occidental Medical Center, Guadalajara, Jalisco, Mexico; Peritoneal dialysis (N = 72) vs hemodialysis (N = 30) that were therapy for at least six months; Mean age of 30 years; Patients with DM2 and inflammatory disease as a cause of CKD were excluded from the study; All HD patients received 3 sessions per week with similar conventional treatment, of these 74.3% non-tunneled catheter and 22.6% AV fistula. The patients in the DP group were in the CAPD modality. The following were evaluated: genotoxic damage, 8-hydroxy-2-deoxyguanosine (8-OHdG), interleukin-2 (IL2), PCR, TNF-alpha; and antioxidants, superoxide dismutase (SOD), catalase (CAT). The markers of oxidative damage to DNA (8-OHdG) were determined by the ELISA method, and the other marks of inflammation (IL2, PCR,) and oxidation (SOD, CAT) were evaluated with colorimetric techniques.

Results: In patients with PD, 8-OHdG was significantly elevated 9.9 ng/ml ± 4.4 ng/ml vs. 7.34 ng/ml ± 3.27 ng/ml p = 0.04) compared to the HD group. The urea in HD and DP differed significantly: HD 108 mg /dl [78 mg/dl ± 132 mg/dl] vs DP 126 mg/dl [102 mg/dl ± 153 mg/dl], p = 0.03. All other routine biochemical measures were comparable in HD and PD; however, there was no significant difference. In the other oxidative stress markers such as CAT, SOD, TNF, PCR, IL-2 there was no significance after comparing both treatments (p = 0.11, p = 0.26, p = 0.27, p = 0, 77, respectively).

Conclusions: In the present study we found a greater oxidative damage to DNA determined by higher levels of 8OHdG in patients on peritoneal dialysis, in comparison to patients on hemodialysis so further studies are required to try to explain the above since some studies have shown greater damage in patients on hemodialysis than in peritoneal dialysis.