Nephrology Dialysis Transplantation 31 (Supplement 1): i279–i297, 2016
doi:10.1093/ndt/gfw175.21

DIALYSIS. EPIDEMIOLOGY, OUTCOME RESEARCH, HEALTH SERVICES RESEARCH - 1

SP579 TREATMENT PATTERNS AMONG CITY AND RURAL PREVALENT HEMODIALYSIS PATIENTS: A CROSS-SECTIONAL STUDY

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Introduction and Aims: Treatment patterns could substantially vary in distinct patients' groups. We investigated differences between city and rural prevalent hemodialysis (HD) patients.
Methods: We performed the analysis of the Russian Registry of Renal Replacement Therapy with inclusion of 10,312 HD patients for which extended individual level data were provided by facilities in the year 2013. They represented 39.1% of all patients treated by HD at 31/12/2013 in Russia. 271 HD prevalent patients with no data on the type of settlement were excluded from analysis. We defined "city" or "rural" groups of patients based on the permanent place of residence. All demographic, clinical and laboratory parameters concern December 2013. Data about general population of Russia was obtained from the official state census statistics.
Results: In the general population of Russia rural residents consisted 26.0%. In our individual level data there were 2,432 (23.6%) rural and 7,880 (76.4%) city residents. In comparison with city HD patients rural residents were younger (P<0.0005) and had lower Charlson comorbidity index. Rural residents had higher systolic and diastolic blood pressure (P<0.0005), higher parathyroid hormone (P<0.05), as well as lower albumin (P<0.01), hemoglobin (P<0.0005) and total cholesterol (P<0.0005). Hypertension (≥140/90 mm Hg) was more frequent in rural than city population (64.6% vs. 60.0, P<0.0005). Proportion of patients with target hemoglobin (≥100 g/L and ≤115 g/L) didn't differ (41.3% in rural vs 40.5% in city population, P=0.48), but higher proportion of patients with hemoglobin less then 100 g/L was revealed in the rural population (27.0% vs 23.4%, P<0.0005). Rural population also had higher percentage of patients with parathyroid hormone ≥ 600 pg/mL (30.4% vs 28.2%, P<0.05). There were no statistically significant differences in percentage of males, diabetics, as well as values of body mass index, spKt/V, total serum calcium and phosphorus.

SP579 Table 1: Demographic, clinical and laboratory characteristics of HD city and rural residents

Parameter	City residents	Rural residents	P
Age, years	53.9±13.6	51.5±13.2	<0.0005
% males	53.1	54.4	0.26
% diabetics	13.8	13.5	0.78
Charlson comorbidity index	4 [3; 5]	3 [2; 5]	<0.0005
Body mass index, kg/m^2	26.6±8.2	26.6±5.4	0.80
BP systolic, mm Hg	139.7±18.7	141.4±18.4	<0.0005
BP diastolic, mm Hg	80.1±10.9	81.6±10.9	<0.0005
spKt/V	1.47±0.32	1.46±0.38	0.08
Albumin, g/L	40.1±4.3	39.8±4.3	<0.01
Hemoglobin, g/L	109.5±15.7	107.8±16.4	<0.0005
Total calcium, mmol/l	2.25±0.25	2.25±0.27	0.91
Phosphorus, mmol/l	1.72±0.55	1.71±0.52	0.22
Parathyroid hormone, pg/ml	335 [160; 659]	348 [169; 683]	<0.05
Total cholesterol, mmol/L	4.83±1.17	4.71±1.14	<0.0005

Conclusions: We revealed substantial differences in treatment patterns between city and rural residents. Particularly, patients living in the rural settlements had significantly higher prevalence of anemia, secondary hyperparathyroidism, and hypertension. These findings suggest the need for stricter monitoring of HD treatment quality indicators among rural residents, and require further studies for revealing the exact mechanisms for such differences.