P1293 **WARFARIN INCREASES THE RISK OF VASCULAR CALCIFICATION IN HAEMODIALYSIS PATIENTS: A MULTICENTER CASE-CONTROL STUDY**

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Background and Aims: Vascular calcifications (VC) are highly prevalent in maintenance haemodialysis patients and it is a recognized risk factor for increased mortality. Previous experimental studies showed the relation between warfarin which has been prescribed frequently in dialysis patients and VC. The aim of this study is to investigate the association between VC and warfarin use in haemodialysis patients.

Method: This was a cross-sectional, observational, multicenter study. VC were assessed using Adragao (AS; pelvis and hands) and Kauppila (KS; lateral lumbar spine) scores in 76 haemodialysis patients from six centers. There were 32 patients (4.5%) being treated with warfarin for at least 1 year out of a total 711 haemodialysis patients and we included 44 control patients with matching parameters of age, sex and dialysis vintage to the study. Clinical characteristics, concomitant treatments, laboratory results were recorded and possible risk factors related to VC were analyzed.

Results: Of the patients, 47% were females, mean age was 65.8 ± 9 years, 23% were diabetics, their mean dialysis vintage was 68.39 ± 38.5 months and mean Kt/V 1.66 ± 0.27. No significant differences in clinical characteristics and basic laboratory results were found between control and warfarin group. In warfarin group, median Kauppila score was higher than control [11 vs 6.5, (25%-75% percentile, 5 vs 15), P=0.032] and percentages of Kauppila score >6 patients were higher, as well (76,6% vs 50%; P=0.029). Median Adragao score was not significantly different between two groups [7 vs 6, (%25,%75 percentile 6 vs 8), P=0.177]. Logistic regression analysis revealed that warfarin treatment was independently associated with Kauppilla scores of >6 (OR 3.28, 95% CI 1.17-9.22, P=0.024).

Conclusion: The results of this study showed that warfarin is a strong risk factor for vascular calcifications, especially in aorta of haemodialysis patients.

Table 1. Basic characteristics of the patients and summary of the results

Parameter	Warfarin (+) n=32	Warfarin (-) n=44	P value
Age (mean±SD)	67.6±9	64.54±8.3	0.143
Female/Male	14; 43%/18; 56%	22; 50%/ 22; 50%	0.646
Dialysis vintage (months, mean±SD)	74.9±44.2	63.6±33.4	0.209
Kt/V	1.62±0.2	1.7±0.2	0.205
Diabetes mellitus +/- (n,%)	6, 18%	12, %27	0,427
Warfarin usage time (months, mean±SD)	65.9±9.7	NA	NA
Kauppilla score (median,-min-max)	11 (1-24)	6,5 (1,20)	**0,032**
Kauppilla score >6 (n, %)	23, 76.6%	22, 50%	**0,029**
Adragao score (median, min-max)	7 (2-8)	6 (0-8)	0,177
Adragao score ≥ 3 (n, %)	30, 93.7%	41, 93.1%	0,638
Serum calcium (mean±SD)	8.82±0.5	8.78±0.5	0.778
Serum phosphorus (mean±SD)	4.62±0.87	4.84±0.89	0.279
Serum parathyroid hormone (mean±SD)	376.23±192.8	457.36±251.2	0.116
Serum albumin (mean±SD)	3.81±0.38	3.91±0.52	0.361
Serum hemoglobin (mean±SD)	11.43±1.1	11.6±1.57	0.595
Serum C-reactive protein (mean±SD)	14.3±12.2	13.8±15.4	0.881

Figure:

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