

Supplementary data for the article:

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Supplementary material

Toxic and essential elements in trabecular and cortical femoral neck of Serbian inhabitants: A correlation with whole blood samples

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Content

Table S1. Content of elements in whole blood, trabecular and cortical bones of male ($n = 10$) and female ($n = 15$) patients

Table S2. Results of analysis of variances (ANOVA) for evaluation of element differences in whole blood, trabecular and cortical bones according to age (categories: 50-59, 60-69, 70-79, 80+ age).

Table S1. Content of elements in whole blood, trabecular and cortical bones of male ($n = 10$) and female ($n = 15$) patients

Element	Gender	Trabecular bone		Cortical bone		Whole blood	
		Mean \pm St. dev.	<i>t-test</i> *	Mean \pm St. dev.	<i>t-test</i>	Mean \pm St. dev.	<i>t-test</i>
Ca (mg/g)	Men	273 \pm 12	0.928	269 \pm 28	0.181	97 \pm 7	0.949
	Women	272 \pm 19		294 \pm 52		97 \pm 8	
Mg (mg/g)	Men	2.74 \pm 0.29	0.586	2.35 \pm 0.29	0.053	21 \pm 2	0.349
	Women	2.81 \pm 0.28		2.57 \pm 0.24		20 \pm 2	
Na (mg/g)	Men	6.09 \pm 0.45	0.575	6.32 \pm 0.54	0.539	3742 \pm 104	0.262
	Women	5.97 \pm 0.9		6.42 \pm 0.27		3665 \pm 191	
K (μ g/g)	Men	436 \pm 197	0.952	477 \pm 184	0.352	204 \pm 15	0.717
	Women	432 \pm 204		421 \pm 117		200 \pm 34	
Zn (μ g/g)	Men	130 \pm 12	0.339	98 \pm 19	0.373	658 \pm 213	0.765
	Women	125 \pm 15		104 \pm 13		689 \pm 276	
Sr (μ g/g)	Men	53.9 \pm 9.0	0.919	57 \pm 12	0.517	29 \pm 10	0.666
	Women	53.3 \pm 18.0		53 \pm 16		28 \pm 8	
Ni (μ g/g)	Men	0.18 \pm 0.14	0.723	0.18 \pm 0.14	0.533	959 \pm 169	0.114
	Women	0.2 \pm 0.17		0.24 \pm 0.30		1110 \pm 254	
Cu (μ g/g)	Men	0.33 \pm 0.17	0.760	0.21 \pm 0.14	0.536	6 \pm 5	0.597
	Women	0.31 \pm 0.17		0.18 \pm 0.11		5 \pm 4	
Pb (μ g/g)	Men	1.09 \pm 0.38	0.073	1.05 \pm 0.70	0.270	31 \pm 19	0.174
	Women	0.78 \pm 0.41		0.66 \pm 0.92		21 \pm 16	
Se (μ g/g)	Men	0.09 \pm 0.17	0.349	0.084 \pm 0.063	0.029	45 \pm 12	0.739
	Women	0.05 \pm 0.03		0.041 \pm 0.029		43 \pm 15	
V (μ g/g)	Men	0.014 \pm 0.023	0.891	0.0030 \pm 0.0048	0.909	0.113 \pm 0.044	0.466
	Women	0.013 \pm 0.024		0.0033 \pm 0.0082		0.127 \pm 0.049	
Mo (μ g/g)	Men	0.20 \pm 0.34	0.318	0.0160 \pm 0.0084	0.666	1.57 \pm 0.51	0.362
	Women	0.10 \pm 0.17		0.0180 \pm 0.0127		1.79 \pm 0.60	
Mn (μ g/g)	Men	0.30 \pm 0.26	0.616	0.121 \pm 0.081	0.913	2.8 \pm 1.3	0.734
	Women	0.26 \pm 0.15		0.124 \pm 0.056		3.0 \pm 1.4	
Co (μ g/g)	Men	0.071 \pm 0.095	0.094	0.025 \pm 0.031	0.134	0.43 \pm 0.20	0.640
	Women	0.027 \pm 0.024		0.012 \pm 0.008		0.47 \pm 0.22	
Cr (μ g/g)	Men	2.9 \pm 4.7	0.512	0.39 \pm 0.21	0.278	1.01 \pm 1.24	0.051
	Women	1.9 \pm 2.8		0.57 \pm 0.46		0.27 \pm 0.54	
Cd (μ g/g)	Men	0.014 \pm 0.011	0.791	0.0090 \pm 0.0099	0.196	0.26 \pm 0.21	0.509
	Women	0.015 \pm 0.013		0.0047 \pm 0.0064		0.21 \pm 0.11	
Rb (μ g/g)	Men	0.10 \pm 0.06	0.349	0.105 \pm 0.048	0.988	100 \pm 8	0.392
	Women	0.14 \pm 0.11		0.105 \pm 0.055		110 \pm 35	
As (ng/g)	Men	8.6 \pm 5.3	0.908	4.1 \pm 2.1	0.926	1.03 \pm 0.34	0.906
	Women	8.9 \pm 3.7		4.2 \pm 2.4		1.05 \pm 0.47	
U (ng/g)	Men	0.37 \pm 0.26	0.934	0.42 \pm 0.29	0.375	17 \pm 17	0.107
	Women	0.36 \pm 0.18		0.34 \pm 0.19		8 \pm 10	

*The mean difference is significant at the 0.05 level.

Table S2. Results of analysis of variances (ANOVA) for evaluation of element differences in whole blood, trabecular and cortical bones according to age (categories: 50-59, 60-69, 70-79, 80+ age)

	Trabecular bone		Cortical bone		Whole blood	
	<i>F</i>	<i>Sig.</i> *	<i>F</i>	<i>Sig.</i>	<i>F</i>	<i>Sig.</i>
Ca	1.092	0.374	0.946	0.436	0.908	0.454
Mg	1.501	0.243	0.291	0.832	1.094	0.374
Na	1.551	0.231	0.388	0.763	0.253	0.858
K	0.405	0.751	0.183	0.907	2.408	0.096
Zn	2.136	0.126	0.721	0.551	1.112	0.366
Sr	2.280	0.109	2.691	0.072	0.932	0.442
Ni	5.668	0.005	0.498	0.688	1.259	0.314
Cu	1.201	0.334	1.779	0.182	0.392	0.760
Pb	1.183	0.340	3.760	0.026	0.368	0.777
Se	0.369	0.776	0.987	0.418	3.580	0.031
V	0.274	0.844	0.441	0.726	0.272	0.845
Mo	1.248	0.318	0.609	0.616	0.397	0.757
Mn	0.995	0.415	1.991	0.146	0.117	0.949
Co	0.446	0.723	0.083	0.969	1.470	0.251
Cr	2.095	0.131	0.894	0.461	0.411	0.747
Cd	2.103	0.130	0.423	0.738	0.204	0.892
Rb	1.120	0.363	0.711	0.556	1.282	0.306
As	0.612	0.615	4.748	0.011	0.726	0.548
U	0.499	0.687	0.343	0.795	0.473	0.705

*The mean difference is significant at the 0.05 level