

Supplementary article data

Analysis of bone mineralization on uncemented femoral stems by [18F]-fluoride-PET

A randomized clinical study of 16 hips in 8 patients

Gösta Ullmark¹, Olle Nilsson², Enn Maripuu³, and Jens Sörensen³

¹Department of Orthopedics, Gävle Hospital and Centre for Research and Development, Uppsala University/County Council of Gävleborg; ²Department of Orthopedics, Uppsala University; ³PET Centre, Department of Radiology, Oncology and Radiation Sciences, Uppsala University, Uppsala, Sweden.

Correspondence: gosta.ullmark@lg.se

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Table 3. See next page.

Table 4. Mean SUV and number (n) of observations for each prosthesis type (SL or BC) and ROI (1–13) at time points 1 week, 4 months, and 1 year, and the differences between 4 months and 1 week, 1 year and 4 months, and 1 year and 1 week, respectively. The p-values are from (paired) t-tests

ROI	1 week		4 months		1 year		4 months – 1 week			1 year – 4 months			1 year – 1 week		
	mean	n	mean	n	mean	n	mean	p-value	n	mean	p-value	n	mean	p-value	n
SL															
1	4.15	6	4.53	8	3.27	6	0.86	0.4	6	-1.15	0.3	6	-0.83	0.4	4
2	3.11	6	3.45	8	2.69	6	0.90	0.3	6	-0.69	0.6	6	-0.18	0.9	4
3	2.65	6	2.74	8	2.29	6	0.64	0.5	6	-0.46	0.7	6	0.04	0.9	4
4	2.49	6	2.54	8	2.59	6	0.43	0.6	6	-0.23	0.9	6	0.19	0.8	4
5	3.39	6	3.09	8	2.27	6	0.37	0.7	6	-0.79	0.6	6	-0.76	0.6	4
6	3.99	6	3.99	8	3.04	6	0.69	0.5	6	-1.02	0.6	6	-1.02	0.7	4
7	4.54	6	4.38	8	3.38	6	0.50	0.7	6	-0.50	0.6	6	-1.23	0.3	4
8	4.71	6	4.77	8	3.34	6	0.63	0.7	6	-1.28	0.2	6	-1.15	0.09	4
9	3.89	6	3.06	8	2.88	6	-0.43	0.6	6	0.02	1.0	6	-0.38	0.7	4
10	3.89	6	2.89	8	2.52	6	-0.41	0.6	6	-0.06	0.9	6	-0.87	0.6	4
11	2.77	6	2.80	8	2.26	6	0.58	0.5	6	-0.53	0.6	6	-0.18	0.7	4
12	2.93	6	3.21	8	2.58	6	0.75	0.3	6	-0.59	0.6	6	-0.25	0.8	4
13	4.13	6	4.01	8	2.63	6	0.26	0.8	6	-1.55	0.2	6	-1.61	0.3	4
BC															
1	3.81	6	4.16	8	2.81	6	1.03	0.2	6	-1.28	0.2	6	-0.76	0.2	4
2	2.87	6	3.56	8	2.23	6	1.34	0.2	6	-0.89	0.4	6	-0.73	0.2	4
3	2.60	6	3.83	8	1.92	6	2.11	0.1	6	-1.40	0.4	6	-0.84	0.08	4
4	2.06	6	2.85	8	1.96	6	1.31	0.08	6	-0.48	0.5	6	-0.42	0.1	4
5	1.83	6	3.25	8	1.93	6	2.07	0.05	6	-0.78	0.4	6	-0.23	0.5	4
6	2.14	6	3.63	8	2.48	6	2.20	0.04	6	-0.81	0.5	6	0.13	0.8	4
7	2.81	6	5.24	8	3.18	6	3.29	0.02	6	-1.43	0.2	6	0.40	0.6	4
8	3.84	6	4.34	8	3.06	6	1.01	0.1	6	-1.30	0.1	6	-0.70	0.4	4
9	2.83	6	3.78	8	2.42	6	1.54	0.1	6	-0.95	0.4	6	-0.66	0.3	4
10	2.62	6	4.09	8	2.01	6	2.32	0.06	6	-1.22	0.3	6	-1.03	0.03	4
11	1.95	6	3.25	8	1.98	6	1.94	0.06	6	-0.78	0.4	6	-0.31	0.1	4
12	1.93	6	3.05	8	2.12	6	1.68	0.04	6	-0.52	0.5	6	0.03	0.8	4
13	2.68	6	3.85	8	2.49	6	1.74	0.07	6	-0.82	0.3	6	-0.54	0.07	4

Table 3. Mean SUV and number of observations (n), where applicable, for each ROI (1–13) and time point (1 week, 4 months, and 1 year) of each group (SL, BC, Ref) and difference between groups: BC minus SL (paired), Ref minus SL, and Ref minus BC. Also, p-value from t-test of whether the mean difference is zero. Note that the reference group (Ref) was only measured at one time point (time “0”)

ROI	SL mean	SL n	BC mean	BC n	Ref mean	Ref n	BC–SL mean	BC–SL p-value	BC–SL n	Ref–SL mean	Ref–SL p-value	Ref–BC mean	Ref–BC p-value
1 week													
1	4.153	6	3.813	6	1.636	12	-0.340	0.7	6	-2.518	0.03	-2.178	0.002
2	3.112	6	2.868	6	1.782	12	-0.243	0.8	6	-1.329	0.2	-1.086	0.06
3	2.652	6	2.603	6	1.766	12	-0.048	1.0	6	-0.886	0.2	-0.838	0.1
4	2.490	6	2.058	6	1.809	12	-0.432	0.6	6	-0.681	0.3	-0.249	0.6
5	3.393	6	1.833	6	1.728	12	-1.560	0.4	6	-1.665	0.2	-0.105	0.8
6	3.993	6	2.140	6	2.446	12	-1.853	0.3	6	-1.547	0.3	0.306	0.4
7	4.543	6	2.813	6	2.542	12	-1.730	0.09	6	-2.002	0.06	-0.272	0.4
8	4.715	6	3.840	6	1.928	12	-0.875	0.3	6	-2.787	0.01	-1.912	0.000
9	3.887	6	2.830	6	2.152	12	-1.057	0.4	6	-1.735	0.1	-0.678	0.06
10	3.890	6	2.617	6	2.188	12	-1.273	0.4	6	-1.702	0.2	-0.429	0.3
11	2.767	6	1.947	6	1.509	12	-0.820	0.4	6	-1.257	0.2	-0.438	0.3
12	2.927	6	1.928	6	1.652	12	-0.998	0.3	6	-1.275	0.2	-0.277	0.3
13	4.135	6	2.680	6	1.720	12	-1.455	0.3	6	-2.415	0.07	-0.960	0.01
4 months													
1	4.530	8	4.162	8	1.636	12	-0.368	0.5	8	-2.894	0.005	-2.527	0.01
2	3.447	8	3.565	8	1.782	12	0.118	0.9	8	-1.665	0.07	-1.782	0.04
3	2.736	8	3.826	8	1.766	12	1.090	0.2	8	-0.970	0.2	-2.06	0.09
4	2.538	8	2.851	8	1.809	12	0.314	0.7	8	-0.728	0.3	-1.042	0.06
5	3.092	8	3.252	8	1.728	12	0.160	0.9	8	-1.364	0.1	-1.524	0.04
6	3.987	8	3.633	8	2.446	12	-0.355	0.7	8	-1.542	0.2	-1.187	0.1
7	4.384	8	5.240	8	2.542	12	0.856	0.2	8	-1.842	0.05	-2.698	0.02
8	4.766	8	4.341	8	1.928	12	-0.425	0.5	8	-2.839	0.01	-2.414	0.005
9	3.062	8	3.780	8	2.152	12	0.718	0.2	8	-0.911	0.09	-1.628	0.05
10	2.888	8	4.088	8	2.188	12	1.200	0.05	8	-0.700	0.3	-1.900	0.06
11	2.804	8	3.254	8	1.509	12	0.450	0.5	8	-1.295	0.06	-1.745	0.02
12	3.212	8	3.051	8	1.652	12	-0.161	0.8	8	-1.561	0.04	-1.400	0.03
13	4.011	8	3.851	8	1.720	12	-0.160	0.9	8	-2.291	0.02	-2.131	0.01
1 year													
1	3.267	6	2.808	6	1.636	12	-0.986	0.3	5	-1.631	0.02	-1.172	0.07
2	2.688	6	2.230	6	1.782	12	-0.350	0.7	5	-0.906	0.2	-0.448	0.4
3	2.295	6	1.915	6	1.766	12	-0.212	0.8	5	-0.529	0.3	-0.149	0.7
4	2.592	6	1.958	6	1.809	12	-0.348	0.7	5	-0.783	0.2	-0.149	0.7
5	2.272	6	1.933	6	1.728	12	-0.082	0.9	5	-0.543	0.2	-0.205	0.7
6	3.042	6	2.480	6	2.446	12	-0.156	0.8	5	-0.596	0.4	-0.034	0.9
7	3.383	6	3.180	6	2.542	12	-0.554	0.3	5	-0.842	0.05	-0.638	0.2
8	3.343	6	3.055	6	1.928	12	-0.680	0.3	5	-1.416	0.007	-1.128	0.03
9	2.877	6	2.415	6	2.152	12	-0.152	0.8	5	-0.725	0.2	-0.263	0.6
10	2.522	6	2.012	6	2.188	12	-0.218	0.7	5	-0.334	0.5	0.176	0.7
11	2.263	6	1.980	6	1.509	12	-0.106	0.9	5	-0.754	0.1	-0.471	0.3
12	2.580	6	2.123	6	1.652	12	-0.402	0.6	5	-0.928	0.1	-0.472	0.2
13	2.635	6	2.488	6	1.720	12	-0.438	0.4	5	-0.915	0.06	-0.768	0.05