

Supplementary article data

Similar effect of stem geometry on radiological changes with 2 types of cemented straight stem

The Müller stem and the Virtec stem compared in 711 hips

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Submitted 2015-01-07. Accepted 2015-09-10.

Table 6. Univariable Cox regression analyses with hazard ratios (HRs) for aseptic loosening (n = 711)

Covariables	No failure		Aseptic loosening		HR (95% CI)	p-value
	n	%	n	%		
Sex						
female	281	96	11	4	ref	
male	406	97	13	3	0.8 (0.4–1.8)	0.6
Age						
≤ 59	135	94	8	6	ref	
60–69	192	96	9	4	0.8 (0.3–2.2)	
70–79	259	97	7	3	0.6 (0.2–1.7)	
≥ 80	101	100	0	0	0.0	0.8
Diagnosis						
OA	510	97	16	3	ref	
RA	9	100	0	0	0.0	
fracture	33	92	3	8	3.1 (0.9–11)	
dysplasia	89	96	4	4	1.3 (0.4–4.0)	
other	46	98	1	2	0.8 (0.1–6.3)	0.5
Stem						
MSS	341	96	15	4	ref	
VSS	346	97.5	9	2.5	0.6 (0.3–1.3)	0.2
Stem offset						
standard	176	96	8	4	ref	
lateral	511	97	16	3	0.6 (0.3–1.5)	0.3
Stem size						
7.5	98	95	5	5	ref	
10	314	96	12	4	0.7 (0.3–2.1)	
12.5	204	98	5	2	0.5 (0.1–1.7)	
≥ 15	71	97	2	3	0.5 (0.1–2.9)	0.7
Cement						
Sulfix-60	139	95	8	5	ref	
Palacos	548	97	16	3	0.6 (0.3–1.5)	0.3
Cup						
uncemented	579	96	23	4	ref	
cemented	108	99	1	1	0.3 (0.0–1.9)	0.2
Head						
ceramic	604	97	22	3	ref	
CoCr	83	98	2	2	0.6 (0.2–2.8)	0.6

Table 7. Univariable Cox regression analyses with hazard ratios (HRs) for osteolysis (n = 399)

Covariables	No osteolysis		Osteolysis		HR (95% CI)	p-value
	n	%	n	%		
Sex						
female	127	84	25	16	ref	
male	204	83	43	17	1.1 (0.7–1.8)	0.7
Age						
≤ 59	90	78	25	22	ref	
60–69	112	80	28	20	1.0 (0.6–1.8)	
70–79	114	89	14	11	0.6 (0.3–1.2)	
≥ 80	15	94	1	6	0.5 (0.1–4.0)	0.5
Diagnosis						
OA	244	84	48	16	ref	
fracture	18	82	4	18	1.2 (0.4–3.4)	
dysplasia	52	84	10	16	1.0 (0.5–1.9)	
other	17	74	6	26	2.0 (0.9–4.7)	0.4
Stem						
MSS	156	80	40	20	ref	
VSS	175	86	28	14	0.7 (0.4–1.1)	0.1
Stem offset						
standard	81	87	12	13	ref	
lateral	250	82	56	18	1.3 (0.7–2.5)	0.4
Stem size						
7.5	52	85	9	15	ref	
10	150	83	30	17	1.0 (0.5–2.1)	
12.5	98	83	20	17	0.9 (0.4–2.1)	
≥ 15	31	78	9	23	1.5 (0.6–3.7)	0.7
Cement						
Sulfix-60	54	73	20	27	ref	
Palacos	277	85	48	15	1.7 (0.9–3.1)	0.1
Cup						
cementless	287	82	62	18	ref	
cemented	44	88	6	12	0.6 (0.3–1.4)	0.2
Head						
ceramic	278	82	61	18	ref	
CoCr	53	88	7	12	0.8 (0.4–1.8)	0.6