

Supplementary data

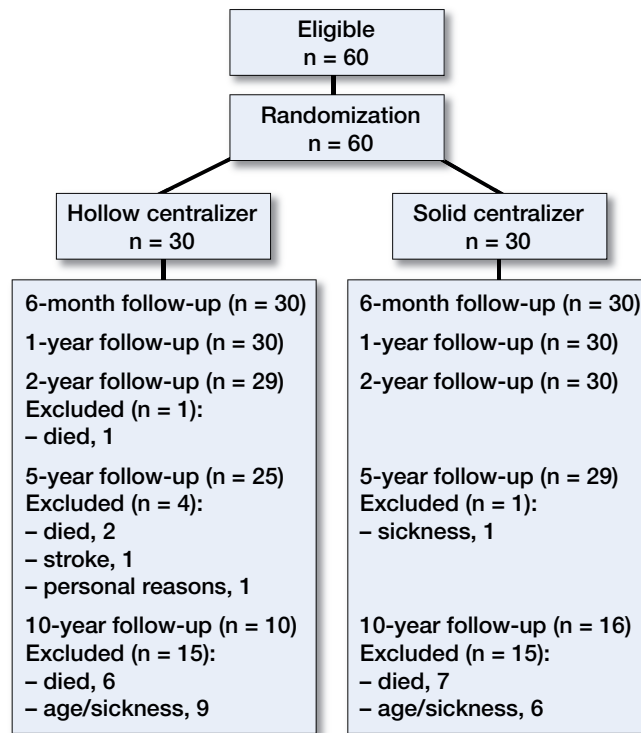


Figure 3. Consort flow chart.

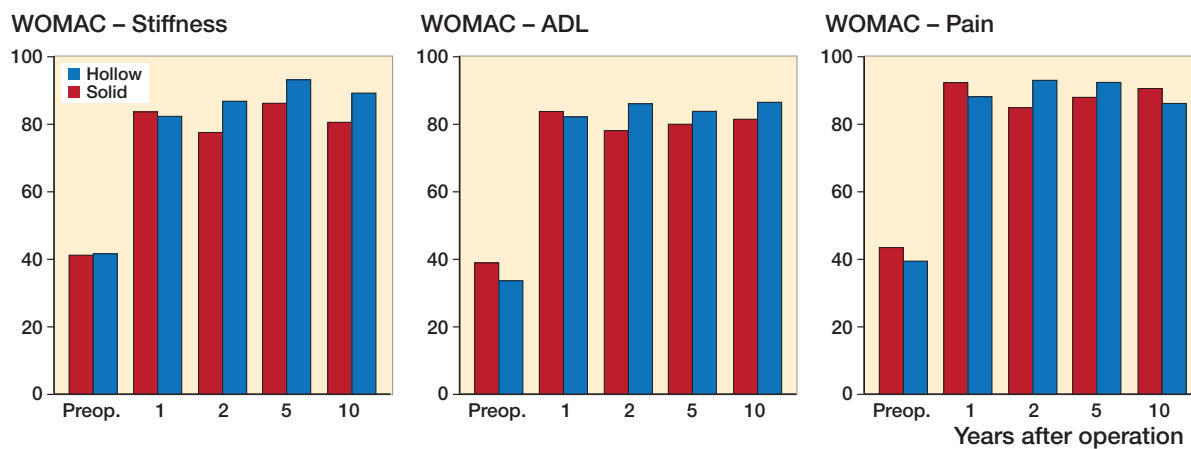


Figure 6. WOMAC scores preoperatively, and at 1, 2, 5, and 10 years, showed no statistically significant differences between the 2 groups at any time.

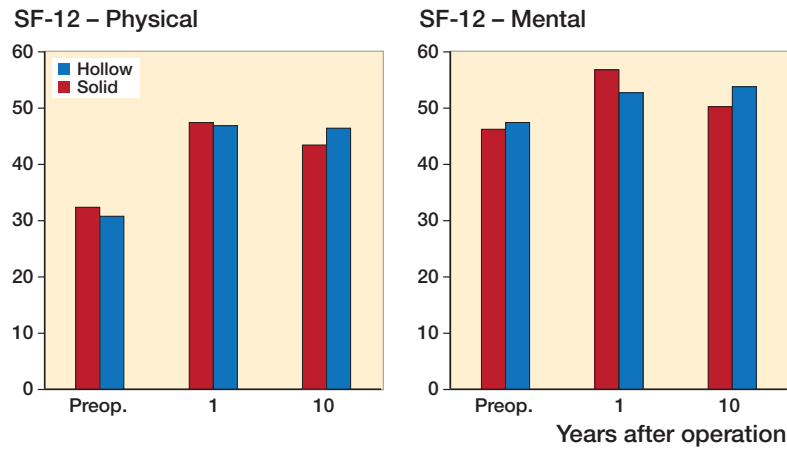


Figure 7. SF-12 scores preoperatively, and at 1 and 10 years, showed no statistically significant differences between the 2 groups at any time.

Table 3. Stem translation and rotation at 6 months and 1, 2, 5, and 10 years. Segment motion of the MS-30 with hollow centralizer and MS-30 with solid centralizer in relation to the femur. Translation is given in mm, and rotation is given in degrees

TYPE OF MOTION	6 Months		12 months		24 months		60 months		120 months	
	Mean	95% CI	Mean	95% CI	Mean	95% CI	Mean	95% CI	Mean	95% CI
Stem translation,										
segment motion (mm)										
Y-translation; proximal (+), distal (-)										
Hollow	-1.02	-1.13 to -0.91	-1.21	-1.34 to -1.09	-1.40	-1.56 to -1.24	-1.74	-1.92 to -1.55	-1.99	-2.28 to -1.69
Solid	-0.22	-0.26 to -0.18	-0.28	-0.32 to -0.24	-0.28	-0.32 to -0.24	-0.36	-0.43 to -0.30	-0.57	-0.83 to -0.30
X-translation										
Hollow	-0.11	-0.17 to -0.05	-0.11	-0.17 to -0.04	-0.15	-0.24 to -0.05	-0.15	-0.23 to -0.06	-0.32	-0.61 to -0.02
Solid	0.05	-0.02 to 0.12	0.06	0 to 0.13	0.05	-0.01 to 0.12	0.04	-0.01 to 0.09	0.14	0.05 to 0.23
Z-Translation										
Hollow	0.02	-0.03 to 0.06	-0.00	-0.07 to 0.06	-0.01	-0.09 to 0.07	-0.03	-0.15 to 0.09	0.09	-0.05 to 0.23
Solid	-0.13	-0.20 to -0.06	-0.15	-0.22 to -0.07	-0.19	-0.27 to -0.10	-0.27	-0.38 to -0.16	-0.22	-0.40 to -0.04
Stem Rotation,										
segment motion (degrees)										
Y-rotation; retroversion (+), anteversion (-)										
Hollow	0.56	0.40 to 0.72	0.76	0.59 to 0.94	0.99	0.75 to 1.22	1.53	1.23 to 1.82	1.34	0.98 to 1.70
Solid	0.50	0.32 to 0.68	0.60	0.42 to 0.79	0.85	0.65 to 1.06	1.21	0.93 to 1.49	1.30	0.96 to 1.64
X-Rotation										
Hollow	-0.11	-0.19 to -0.03	-0.18	-0.27 to -0.08	-0.26	-0.37 to -0.15	-0.39	-0.64 to -0.15	-0.47	-0.66 to -0.27
Solid	0.02	-0.10 to 0.14	0.00	-0.09 to 0.10	-0.10	-0.22 to 0.01	-0.19	-0.32 to -0.06	-0.31	-0.51 to -0.11
Z-Rotation										
Hollow	0.06	-0.02 to 0.13	0.05	-0.05 to 0.14	0.07	-0.01 to 0.16	0.04	-0.11 to 0.19	0.10	-0.03 to 0.24
Solid	-0.05	-0.10 to 0.00	-0.09	-0.14 to -0.05	-0.09	-0.16 to -0.01	-0.10	-0.20 to -0.00	-0.11	-0.33 to 0.11