

Supplementary article data

The incidence of late prosthetic joint infections

A registry-based study of 112,708 primary hip and knee replacements

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Table 1. Prosthetic joint infection (PJI) incidence rates by surveillance year after primary joint replacement

Year under surveillance	Prostheses under surveillance ^a	Number of PJIs	Incidence rate (%) of PJI per prosthesis-year (95% CI)
1	110,749	895	0.808 (0.757–0.863)
2	103,104	170	0.165 (0.142–0.192)
3	89,264	95	0.106 (0.087–0.130)
4	76,151	51	0.067 (0.051–0.088)
5	63,317	43	0.068 (0.050–0.091)
6	50,435	25	0.050 (0.034–0.073)
7	40,046	15	0.037 (0.023–0.062)
8	31,137	24	0.077 (0.052–0.115)
9	22,814	10	0.044 (0.024–0.081)
10	15,822	8	0.051 (0.026–0.100)
11	10,300	6	0.058 (0.027–0.127)
12	5,628	3	0.053 (0.018–0.157)
13	1,684	0	0.000 (0.000–0.228)

^a In the middle of the surveillance year

Table 2. Cumulative prosthetic joint infection (PJI) incidences by operated joint

Time period after surgery	Total		Hips		Knees		p-value (hip vs. knee)
	PJIs/prostheses	Cumulative incidence (%) (95% CI)	PJIs/prostheses	Cumulative incidence (%) (95% CI)	PJIs/prostheses	Cumulative incidence (%) (95% CI)	
Entire follow-up	1,345/112,708	1.20 (1.13–1.26)	464/50,272	0.92 (0.84–1.01)	881/62,436	1.41 (1.32–1.51)	< 0.001
< 2 years	1,065/112,708	0.95 (0.89–1.00)	355/50,272	0.71 (0.64–0.78)	710/62,436	1.14 (1.06–1.22)	< 0.001
2–13 years	280/112,708	0.25 (0.22–0.28)	109/50,272	0.22 (0.18–0.26)	171/62,436	0.27 (0.24–0.32)	0.056

Table 3. The results of sensitivity analyses

Outcome	Original analysis	Sensitivity analyses		
		Exclusion of simultaneous bilateral joint replacements	PJIs with uncertain linkage included as endpoints	Patients with only one joint operated between 1980 and 2011
Cumulative PJI incidence (%), (95% CI)	1.20 (1.13–1.26)	1.17 (1.10–1.23)	1.51 (1.44–1.58)	1.42 (1.32–1.52)
Incidence rate (%) of late PJI per prosthesis-year (95% CI)	0.069 (0.061–0.078)	0.067 (0.059–0.075)	0.103 (0.094–0.114)	0.092 (0.07–0.110)
Incidence rate of (%) very late PJI per prosthesis-year (95% CI)	0.051 (0.042–0.063)	0.050 (0.040–0.062)	0.095 (0.081–0.110)	0.073 (0.056–0.096)
Change in the incidence rate of late PJI, incidence rate ratio (95% CI)	0.98 (0.93–1.03)	0.99 (0.94–1.03)	0.99 (0.95–1.03)	1.02 (0.94–1.03)
Change in the incidence rate of very late PJI, incidence rate ratio (95% CI)	1.11 (1.02–1.20)	1.11 (1.03–1.19)	1.04 (0.99–1.08)	1.10 (0.94–1.30)

PJI: prosthetic joint infection.