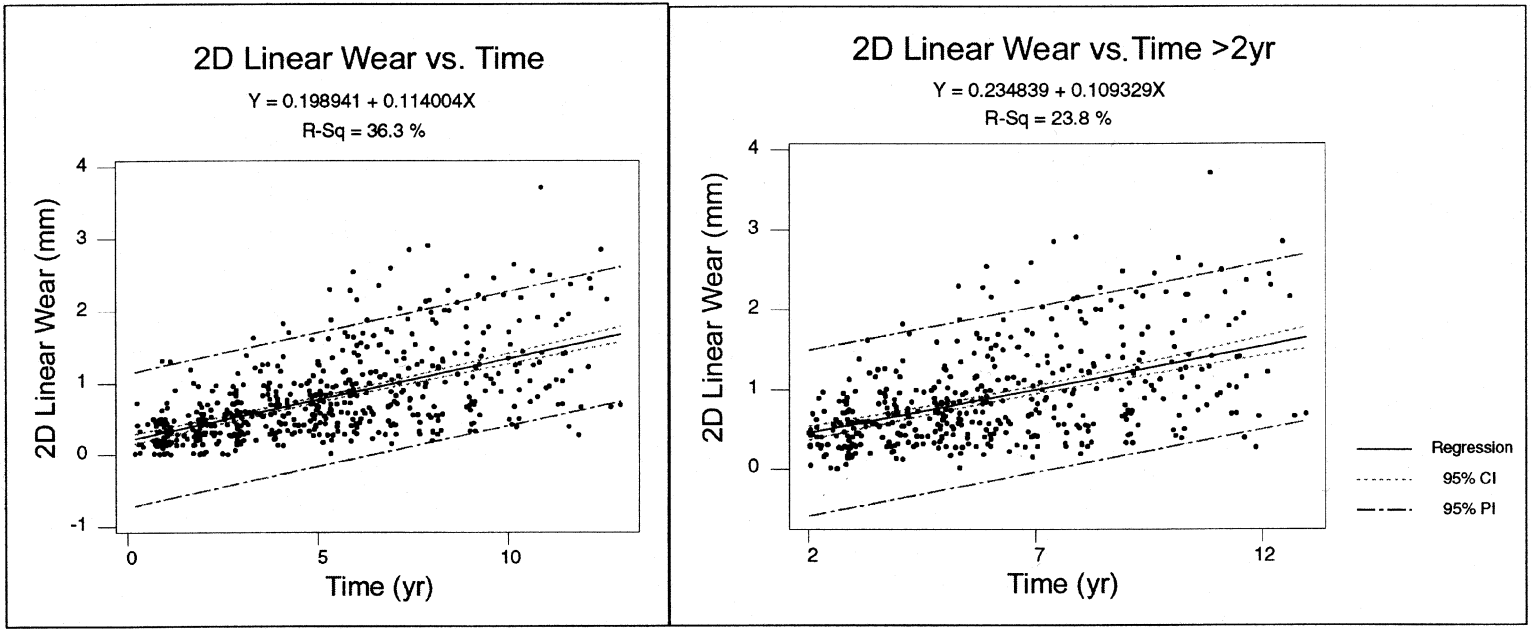

Fig. E-1

On the left, the regression line for two-dimensional wear versus time with use of all observations shows that the bedding-in effect (y-intercept) equals 0.199 mm. On the right, the regression line for two-dimensional wear versus time with use of observations after two years shows a true wear rate (slope) of 0.109 mm/year. CI = confidence interval, and PI = prediction interval.

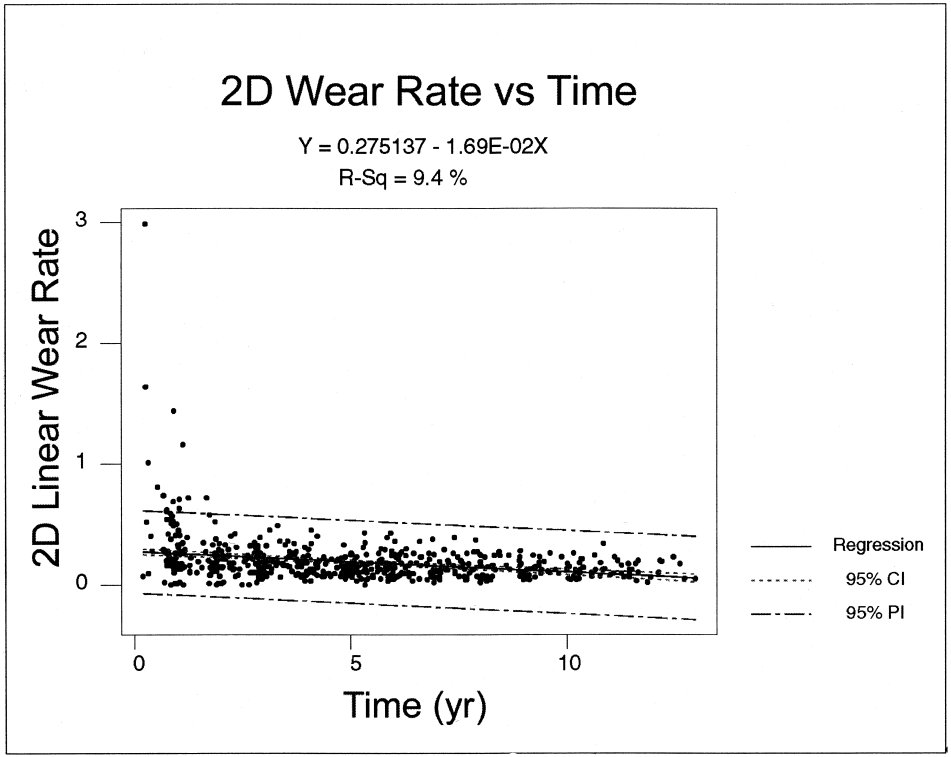

Fig. E-2

The two-dimensional linear wear rate versus time for all observations. Note that wear rates stabilize in the first two years, with completion of the bedding-in effect, and then decrease slightly over time. CI = confidence interval, PI = prediction interval.

Table E-1 Comparison of Linear Wear Rates by Yearly Intervals

Comparison Interval (years)	N	#1 Mean 2D Wear Rate mm/year	Standard Deviation	#2 Mean 2D Wear Rate mm/year	Standard Deviation	Paired t test (p value)
1 to 2	53	0.327	0.238	0.200	0.132	0.000*
2 to 3	42	0.207	0.117	0.176	0.104	0.012*
3 to 4	34	0.192	0.100	0.180	0.199	0.323
4 to 5	34	0.164	0.078	0.155	0.065	0.420
5 to 6	36	0.162	0.091	0.155	0.090	0.242
6 to 7	29	0.174	0.105	0.068	0.099	0.218
7 to 8	16	0.141	0.071	0.136	0.078	0.500
8 to 9	17	0.138	0.079	0.143	0.070	0.348
9 to 10	13	0.157	0.064	0.152	0.073	0.395
10 to 11	7	0.158	0.065	0.160	0.057	0.735
11 to 12	2	0.156	0.099	0.150	0.071	0.856

A paired t test comparing yearly wear rates demonstrated no significant difference in the two-dimensional wear rates after the third postoperative year. Completion of the bedding-in process is assumed by this time. *Significant difference at 95% level.