

Indomethacin inhibits the recurrence of excised ectopic ossification after hip arthroplasty

A 3–4 year follow-up of 8 cases

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Eight patients were treated with indomethacin and excision of paraarticular ossification after hip arthroplasty. In 1986 we reported that after 3 months substantial ossification had recurred in only 2 patients. We now report that ossification had not progressed further at follow-up 3–4 years later. All 8 patients were painfree and the majority had good hip motion. We conclude that indomethacin permanently prevents recurrence after excision of paraarticular ossification.

We have previously reported good results of indomethacin treatment combined with excision of ectopic ossification after hip arthroplasty (Kjærsgaard-Andersen & Schmidt 1986). We now report further follow-up of our 8 cases, 3–4 years postoperatively.

Before excision 7 cases had ossification Grade 3 and one case Grade 2 according to the classification of DeLee et al (1976). One year postoperatively only two cases had Grade 2 and three Grade 1. After another 2–3 years none of the cases had had any radiographic progress of ossification (Table 1). All were satisfied, all but one had normal walking ability and were free from pain, and only two had marked restriction of hip motion.

We conclude that indomethacin permanently prevents recurrence after excision of paraarticular ossification. This conclusion supports the prophylactic use

of indomethacin in patients who have a high risk of heterotopic bone formation after hip arthroplasty (Schmidt et al 1988).

References

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Table 1. Patients treated with indomethacin and excision of para-articular ossifications after total hip arthroplasty. Range of motion is a sum of extension-flexion, abduction-adduction and rotation in the hip. Ossifications were graded from 0–3 according to DeLee et al (1976).

Case	Sex	Age at arthroplasty (yr)	Interval arthroplasty to excision (mo)	Ossification grade		Range of motion		Latest follow-up (mo)
				Before excision	At latest ^{a)} follow-up	Before excision	At latest follow-up	
1	M	71	33	3	1	110	195	50
2	M	61	30	3	1	50	215	50
3	M	59	6	3	1	45	230	48
4	M	64	21	2	0	120	215	44
5	F	88	5	3	0	0	170	37
6	M	68	35	3	2	10	100	36
7	M	60	54	3	2	15	190	47
8	M	78	8	3	0	90	185	39

^{a)} Same as at 12-month follow-up (Kjærsgaard-Andersen and Schmidt 1986).

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