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Abstract Number : A60533

1 **Abstract Title**

Resurfacing the Thin Native Patella: Is It Safe?

2 **Abstract Description**

Introduction: Whether to resurface the patella during total knee arthroplasty (TKA) remains debated. One often cited reason for not resurfacing is inadequate patellar thickness. However, when left un-resurfaced, this cohort has known relatively high revision rates. The aim of this study is to describe the implant survivorships, reoperations, complications and clinical outcomes in patients who underwent patellar resurfacing of a thin native patella.

Methods: Our institutional total joint registry was used to identify patients undergoing primary TKA with patellar resurfacing from 2000 to 2010. Of the 11,333 identified patients, 200 (1.8%) had a pre-resection patellar thickness of ≤19mm. Pre-resection and post-resection patella thickness was measured intraoperatively using calipers. Median pre-resection and post-resection thickness was 19 (range 12-19) and 12.5 (range 10-17), respectively. Mean age was 69 years, mean BMI 31 kg/m2, and 93% were female. Indications for surgery included: osteoarthritis (n=153), rheumatoid arthritis (n=33), post-traumatic arthritis (n=14). Median follow-up was 10 years (range 2-20).

Results: At 10 years, survivorships free of any patella revision, patella-related reoperation, periprosthetic patella fracture, and patella-related complication were 98%, 98%, 99%, and 97%, respectively. There were 2 patella revisions: 1 for aseptic loosening and 1 for PJI. There were 2 additional patella-related reoperations, both arthroscopic synovectomies for patellar clunk. Two patients underwent MUA. There were 3 periprosthetic patella fractures managed nonoperatively, all with well-fixed components and intact extensor mechanisms. Radiographically, the patella appeared well fixed in all non-revised knees. Knee society scores improved from mean 36 preoperatively to mean 81 at 10-years postoperatively.

Discussion: Resurfacing the thin native patella was associated with high survivorship free of patellar revision at 10-year follow-up. None-the-less there was one case of patellar loosening and 3 periprosthetic patella fractures. These risks must be weighed against the known higher incidence of revision when the thin native patella is left un-resurfaced.

3 **Does this study include the use of large administrative databases (e.g., Medicare database, Nationwide Inpatient Sample, NSQIP, Humana database, Statewide or country database or registry, or any other BIG DATA source)?**

No

4 **If the presenter of this paper is a trainee, will the senior author be able to attend the meeting and answer audience questions?**

Yes

Has this work been :

5 Not Applicable

6 **FDA Status: Policy provides that "off-label" uses of a device or pharmaceutical may be described in the CME activities as long as the "off-label" status of the device or pharmaceutical is also specifically disclosed (i.e. that the FDA has not approved labeling the device for the described purpose). Any device or pharmaceutical is being used "off-label" if the described use is not set forth on the product's approved label.**
Documentation of FDA status for uses described in my work for this educational program.

Not Applicable

7 **Clinical category that best describes the content of your proposal**

Primary Knee

8 **Does this study simultaneously describe both hip and knee arthroplasty patients? (e.g., includes both THA and TKA patients)?**

No

9 **How would you rate this abstract's level of evidence?**

Level 3: Retrospective cohort study or Case Control Study

Description / Examples

Retrospective cohort study.

10 **Have you and your co-authors disclosed all potential conflicts of interest through the AAOS disclosure process, http://www.aaos.org/disclosure?**

Yes

11 **Are ANY of the conflicts of interest of ANY of the authors related to this study?**

No

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