

Patellofemoral Arthroplasty In Community Programs: Case Series of 425 Patients

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Disclosures

Consultant/Speaker

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Introduction



- Patellofemoral arthroplasty (PFA) has historically had mixed results, but modern onlay designs have shown increasing clinical success.
- Contemporary techniques and components allow avoidance of total knee replacement and result in reliable clinical improvements.
- A relatively infrequent diagnosis, it is important to report the results and outcomes of PFA in the community setting, by non-academic programs.



Objective

- The purpose of this study is to evaluate the mid-term outcomes of PFA from two community programs in a case series.



Methods

- From 2011 to 2017, 425 patellofemoral arthroplasties were performed by four surgeons at two community programs.
- The majority of patients were female (327 / 425, 77%).
- Followup was performed for minimum 2 years, with average 7.1 years followup.
- Patient selection criteria and surgical technique tips will be described.
- Statistical analysis of the two groups was performed with Student's two-tailed T-test.



Results

- There were no intraoperative abandonments to total knee replacement.
- There were 8 lateral releases performed. Knee Society Scores increased from average 78 to 96 ($p < 0.05$).
- The impairments leading to low preoperative scores, and also serving as areas of most improvement, were stair climbing and pain relief.
- Three patients developed asymptomatic patellar avascular necrosis.
- 15 patients (3.5%) required revision to TKA at average 6.2 years.



Discussion



- ✓ Isolated patellofemoral arthritis is an infrequent diagnosis, and PFA an uncommonly performed procedure. In this cohort of patients treated by community surgeons, with careful patient selection, patellofemoral arthroplasty can have excellent mid-term results.
- ✓ Risk of conversion to total knee arthroplasty is much lower than previous reports.
- ✓ Strict adherence to proper selection criteria is imperative to achieve reliable clinical outcomes.
- ✓ In most patients, patellofemoral arthroplasty consistently improves stair function and anterior knee pain.
- ✓ With careful attention to patient selection and two particular surgical steps, modern techniques are reliable and reproducible for patellofemoral arthroplasty in the nonacademic setting.

