

# Arthroscopic Treatment of Patella Clunk and Crepitus Syndromes after Posterior Stabilized TKA

JCHO Saitama Medical Center  
Takao Kodama  
Toshie Sasaki  
Shu Kobayashi  
Hiroshi Shimosawa  
Hiroya Kanagawa

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# Disclosure

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Smith&Nephew    consultant

DePuy Synthes    consultant

Biomet    consultant

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# Introduction

Patella clunk and crepitus syndromes (PCS) are one of the major complications of posterior stabilized TKAs.



# Cause



**PCS** are caused by fibrous nodule tissues developed at the junction of proximal pole of patella and quadriceps tendon, which impinge against the anterior corner of the box of the femoral component.

# Objective

The objective of this study is to find the incidence of PCS with **PFC sigma RPF**, and review the results of our treatment.



# Incidence of PCS (6.5%)

Patella **clunk** and **crepitus** syndrome

clunk    crepitus    knees

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PFC sigma RPF	11	16	414
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# Occurrence time

Patella **clunk** and **crepitus** syndrome

shortest

longest

Average

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1 month

6 years

12.8 months

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# Treatment

Patella **clunk** and **crepitus** syndrome

arthroscopic  
debridement

conservative

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16

11

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Average operation time is 9.3 minutes. The symptom immediately disappears after the operation.

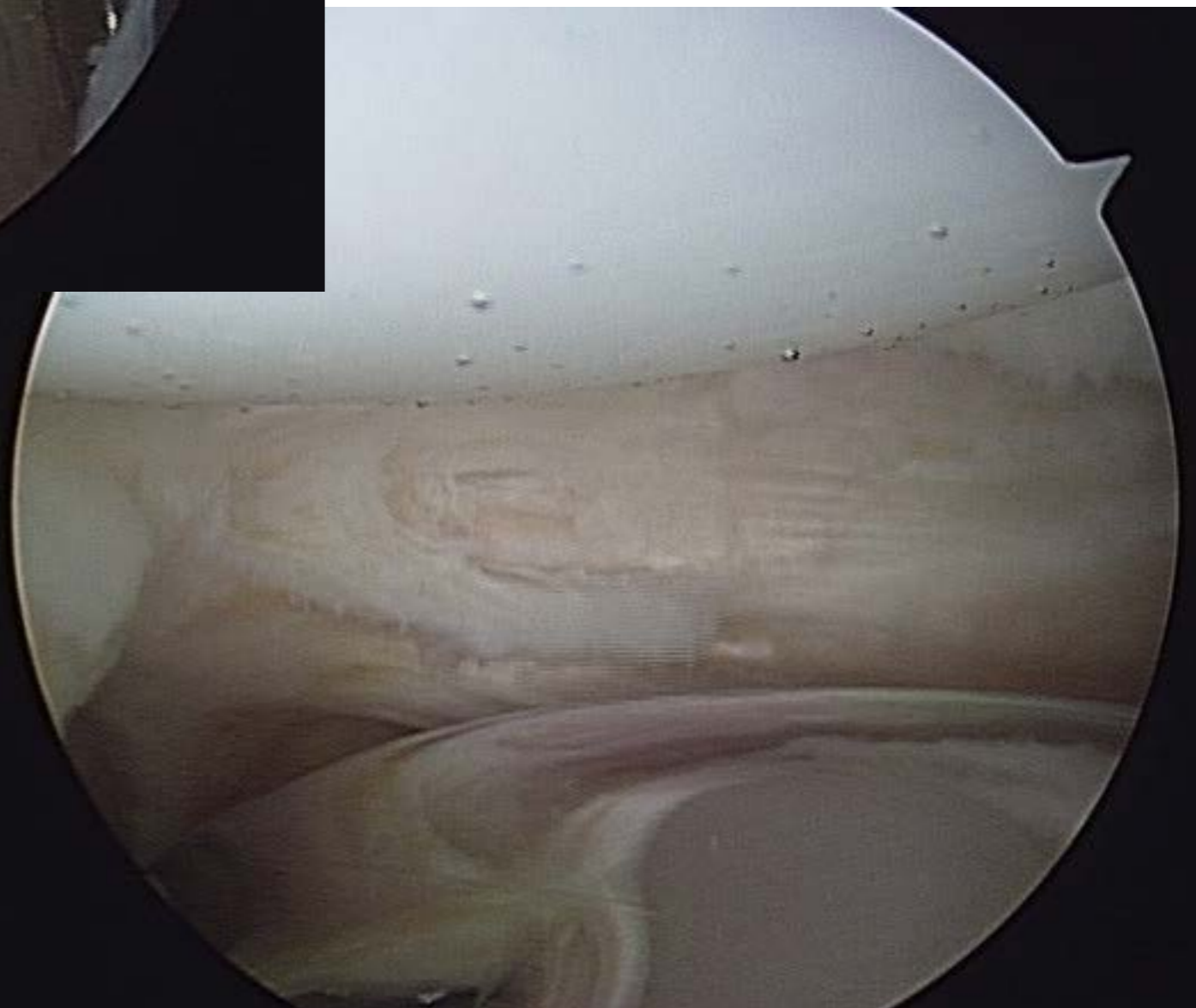
PCS disappeared spontaneously in 7 patients within 7 months, but this mechanism is uncertain.





After

Before

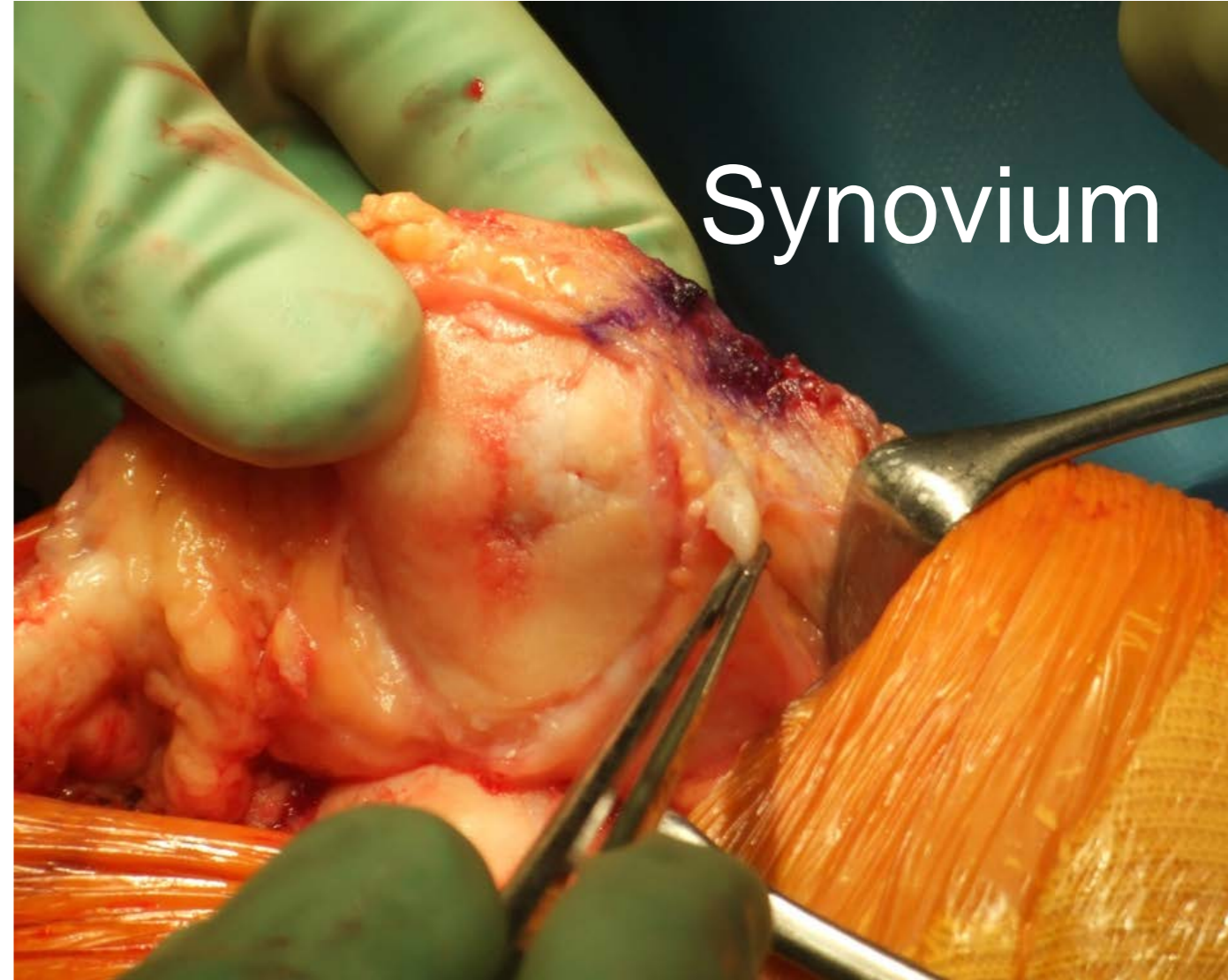


# Cause of PCS



**PFC sigma RPF** has edgy box, which extend more proximally than any other implants. This **implant design** may be one of the reasons for the fibrous tissue to be impinged against, and the scars may grow larger and cause crepitus and finally start to clunk with popping noise.

# Prevention of PCS



To prevent PCS, coagulation and careful removal of soft tissues in proximal part of patella including synovium is necessary during the operation.

# RA vs OA

Patients with **rheumatoid arthritis**, PCS tend to occur later (mean, 24.8 months), and patients with **osteoarthritis**, PCS tend to occur earlier (mean, 11.5 months). In rheumatoid arthritis patients, control of disease itself is essential because poor control of the disease may easily cause synovitis that will impinge against femoral box.

# Conclusion

PCS is depended on implant design but arthroscopic debridement is effective when the symptom doesn't disappear within 6 months