



TKR after patellectomy

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- The authors declared no conflicts of interest for this presentation.

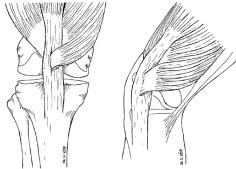


Indications for patellectomy?

PATELLECTOMY WITH VASTUS MEDIALIS OBLIQUUS ADVANCEMENT FOR COMMUNATED PATELLAR FRACTURES

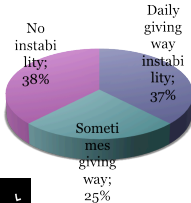


J Bone Joint Surg [Br] 1996;78-B:13-6.
A PROSPECTIVE RANDOMISED TRIAL
IZGE GÜNAL, ASIM TAYMAZ, NUSRET KÖSE, EROL GÖKTÜRK, SINAN SEBER

- Comminuted patellar fractures
- Multiple surgeries for patellar instability...
- Not recommended





History

- Natural history after patellectomy: INSTABILITY
- Lennox, Bentley *J Bone Joint Surg Br* 1994
- At 90° of flexion++
- Often posterior (hamstrings tendons)

- Loss of extension force 30-50%
- Loss of Hamstrings force
- Loss of ROM
- Kuster M
Knee Surg Sports Traumatol Arthrosc 1996
- Fletcher S *JBJS* 1976: effect of patellectomy on knee function.
- QOL?: walking, stairs

KNEE FUNCTION AFTER PATELLECTOMY


A 12- TO 48-YEAR FOLLOW-UP *JBJS Br* 1994

I. A. C. LENNOX, A. G. COBB, J. KNOWLES, G. BENTLEY

Results

- N=69
- Rate of TFJ OA= other knee
- 25% decrease activity level
- Bad result if occurrence of OA
- Anterior knee pain frequent
- Some Adaptation

	Anterior knee pain (n=52)	Osteoarthritis (n=25)	Fracture (n=6)
Severe pain	4 (8)	12 (48)	0 (0)
Crepitus	15 (29)	5 (20)	1 (17)
Swelling	29 (56)	14 (56)	1 (17)
Giving way	34 (65)	12 (48)	3 (50)



Clinical case

- Women 60
- Bilateral patellectomy 1980 (anterior knee pain)
- Pain
- AND
- Instability
- Both knees
- -20; 90

D

Clinical case (2)

- Bilateral TKR
- CS prosthesis

Clinical case (3)

- Good result
- - pain
- 0-90 passive
- -20 active extension

Clin Orthop Rel Res (2013) 471:548–553
DOI 10.1007/s11999-013-2651-4

Clinical Orthopaedics
and Related Research

SYMPOSIUM: PAPERS PRESENTED AT THE ANNUAL MEETINGS OF THE KNEE SOCIETY

Does Patellectomy Jeopardize Function After TKA?

Reina Yao MD, Matthew C. Lyons MD,
James L. Howard MD, MSc, FRCS(C),
James P. Mackay MD, FRCS(C)

Results

- Expectations of a TKR after patellectomy?
- N=50
- Mean FU 69 months (24-200)
- Mean active flexion 100
- Extensor lag deficit 10 to 20°
- No > reoperations
- Result correlated with the time between patellectomy and TKR

Type of constraint


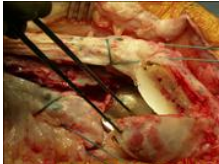
- Paletta Jr GA, Laskin RS. Total knee arthroplasty after a previous patellectomy. J Bone Joint Surg [Am] 1995
- Martin SD, Haas SB, Insall JN. J Bone Joint Surg Am. 1995 Sep;77(9):1323-30. Primary total knee arthroplasty after patellectomy
- Posterior stabilized implant >> Cruciate retaining

Other options

Allograft Reconstruction of the Extensor Mechanism for Progressive Extensor Lag After Total Knee Arthroplasty and Previous Patellectomy

A 3-Year Follow-Up
The Journal of Arthroplasty Vol. 14 No. 7 1999
Shrikant Kulkarni, MCh (Orth), Milind Sawant, FRCS (Orth), and John Ireland, FRCS

- Small series
- Good results
- Stable with time
- 3 years

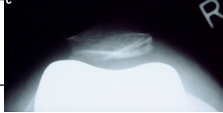

Iliac crest graft

International Orthopaedics (SICOT) (2012) 36:545-552
DOI 10.1007/s00284-011-1281-z
ORIGINAL PAPER

Reconstruction of the patella with an autogenous iliac graft: clinical and radiologic results in thirteen patients

Dorothea Daezler · Maximilian Rudert · Carl Joachim Wirth · Christina Stukenborg-Colsman

- N=13
- FU 40 months
- IKS 67,3

Total patellar arthroplasty

- Kwong The Knee 2008
- Ries Clin Orthop Relat Res 2006
- Results: disappointing
- Early failures 1 year




Take Home Message

Don't do a patellectomy!

If OA: TKR possible
Preservation of continuous fibrous tissue between femur and tibia+++
CS component

Relatively good results (pain relief)

