

Optimizing Patellar Component Implantation



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Aix en Provence



What is of importance?

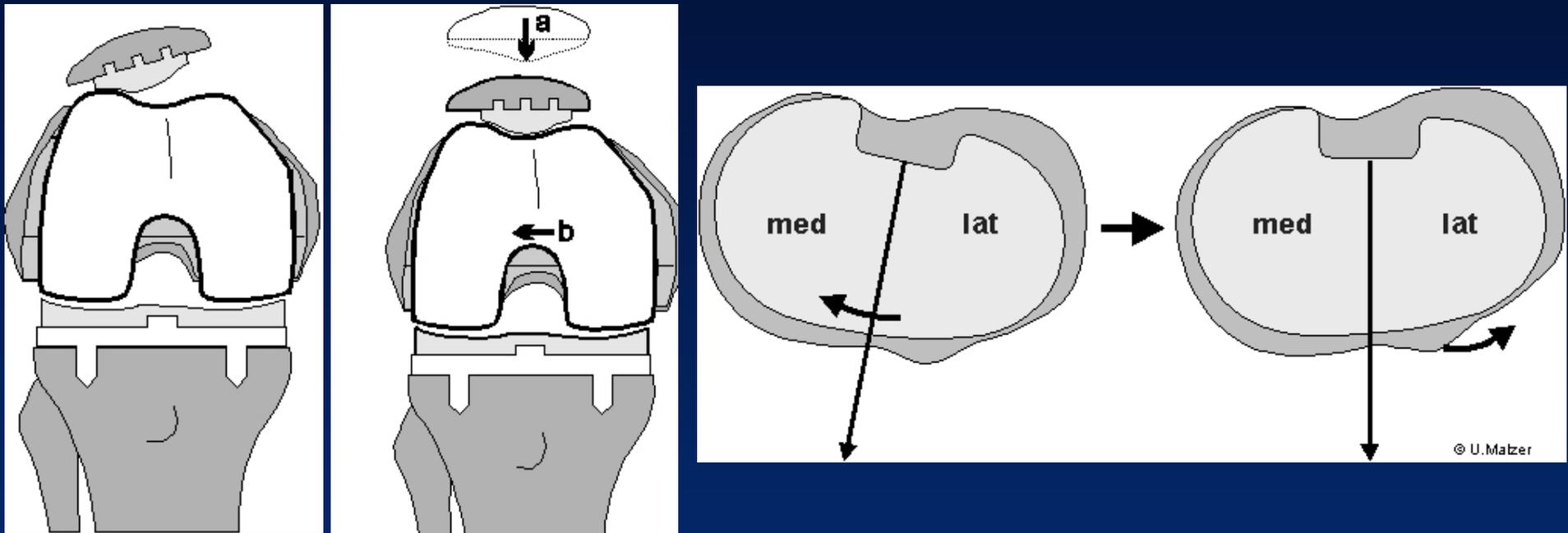
- **Centered** = proper patellar tracking
- **Bone vascularity**
- **Thickness**
 - Too much : overload
 - Not enough : fracture
- **Stability of component**



Rotational alignment

Berger Clin Ortop 1998, Barrak Clin Ortop 2001

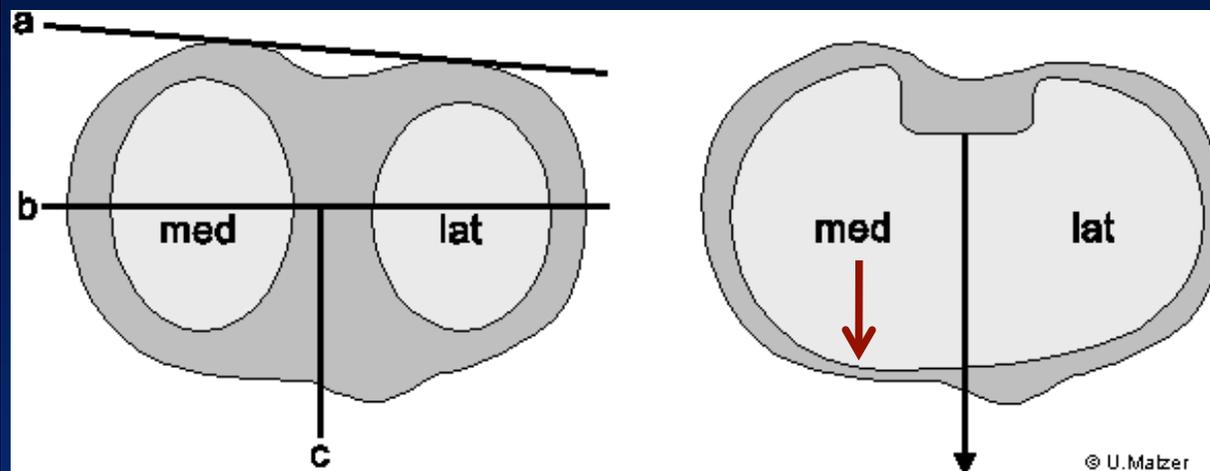
- External rotation of both femoral and tibial components
- Lateralization of the trochlea and medialization of tibial tubercle



Rotational alignment

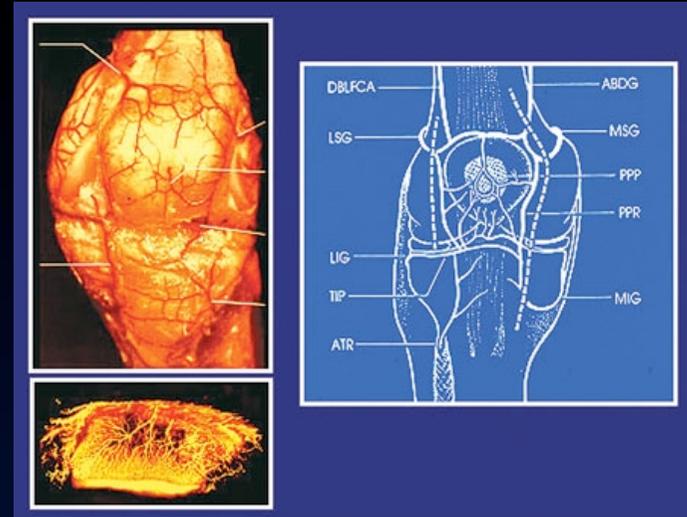
- 3° ER especially in valgus deformity
- Cover the lateral plateau and pivot to align with anterior bony edge of the medial one
- Medial border of patellar tendon (patella reduced)
- Check/ROM

Hepistein & Ranawat *Current Opinion Orthop* 2008
Ikeuchi *JBJS* 2007



Vascularity

- Avoid lateral retinaculum release (especially in medial approach)
- In case of hyperpressure perform lateral partial resection (template in place)



Patella Cut



- Below the lateral subchondral bone...

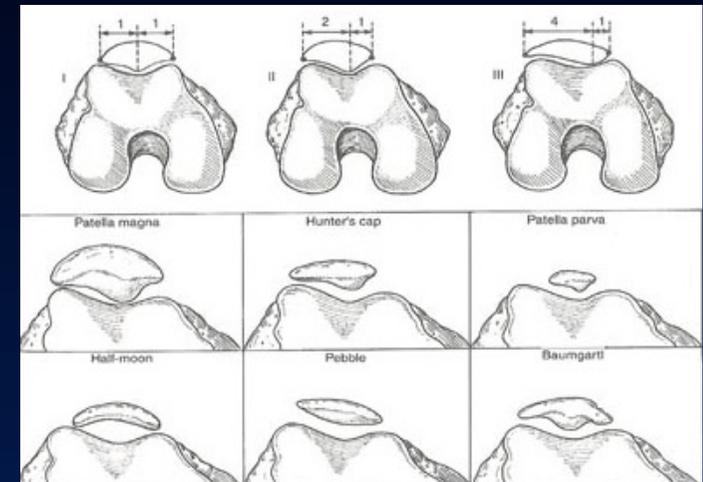
- Avoid asymmetric cut

- Avoid too thick or too thin

- Prefer inlay

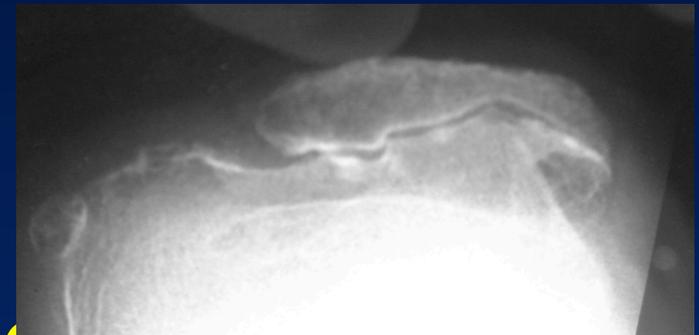
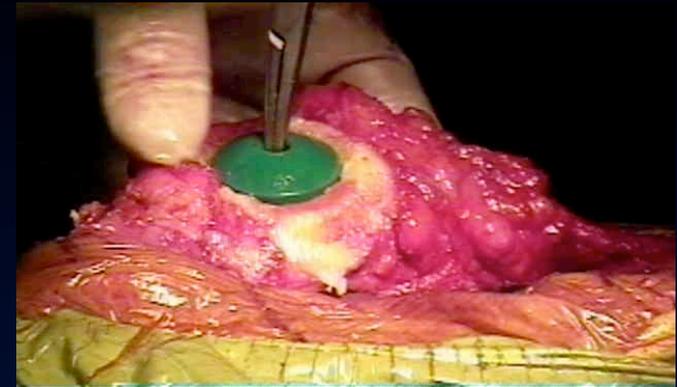
- Medialize

- Palpation of the ant cortex



Center the patella

- From sup to inf
- From med to lat
- Don't overhang
- Medial location optimizes tracking
- Resect lateral facet if needed



Stability of component

- Bone stock (medial part)
- Peg (3 small or 1 large?)
- Microperforations in sclerotic bone



Take home messages

- Not the easy part of the procedure
 - Last step
- Pay attention to approach
- Difficult cut and implantation
- Check perop tracking attentively