

Osteotomy Vs UKA - limits & Indications



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Osteotomy v UKA

The literature: UKA wins!

Outcome	better
Longevity	better
Complications	less

- 49 HTO vs 42 UKA @ 5-10y G/E: UKA 76% vs 43% HTO
• Broughton et al, Bristol, *JBJS[Brj]* 1986
- Same cohort @ 12-17y
Satisfactory: 42% UKA vs 21% HTO
Revision: 12% UKA vs 35% HTO
• Weale & Newman *CORR* 1994

Osteotomy v UKA

It is true HTO...

- never perfect
- long recovery
- C.W. issues for TKA
- deteriorate with time
 - But getting better.....



Osteotomy v UKA

Year	Survivorship
1999	75% at 5 years, 51% at 10 years, 39% at 15 years and 30% at 20 years
2003	65-74% at 10 years
2004	97.3% at 7 years, 95.1% at 10 years and 86.9% at 15 years
2005	89.5% at 5 years, 74.7% at 10 years and 66.9% at 15 and 20 years
2006	80% at 10 years, 66% at 15 years and over 52.8% at 17 years of follow-up
2006	85% at 20 years
2008	94% at 5 years, 79.9% at 10 years, 65.5% at 15 years and 54.1% at 18 years
2008	97.6% at 10 years and 90.4% at 15 years

From Amendola & Bonasia *Int Orthop* 2009

Osteotomy v UKA

Weaknesses in The Literature:

- Few papers comparing HTO & UKA
- Only 1 compares O.W. HTO
- Old HTO
 - decision making- too late, wrong patient
 - techniques / fixation
 - rehab.



Osteotomy v UKA

SO...

Literature not so adverse

- Cochrane review 2007
- no sig difference in pain, function, gait between UKA & HTO
- Dettoni et al 2008 at AAOS
- 1st comparison UKA with OW HTO-
no difference in clinical and Xray results

HTO patients come back!



Osteotomy v UKA

And UKA- not so good:

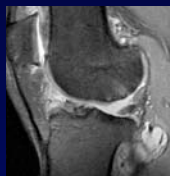
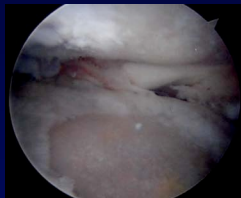
- lifelong commitment to arthroplasty
- not easy- alignment / balancing
- problem to revise



Osteotomy v UKA

And UKA- not so good:

- lose proprioception
- Sports people tolerate OA and are happy



Patient Selection

Prerequisites: as for UKR:

- Isolated single T-F compartment OA
- Max. coronal deformity 15°
- Min. ROM 15 -100°
- ? ACL intact



Patient Selection

It's just that it is for
DIFFERENT PATIENTS

The discussion
'UKR or HTO?'
DOES NOT EXIST!

- Obesity, smokers, inactive etc



Patient Selection

It's just that it is for
DIFFERENT PATIENTS

- Younger (mid 40's of mid 60's)
- More active / sporty
- Obesity, smokers, inactive etc better for UKR

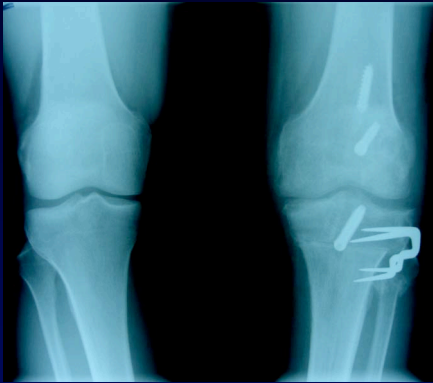
HTO or UKR or TKR



HTO or UKA or TKA



HTO or UKR or TKR



HTO or UKA or TKA



Favourable Factors for HTO

- Proximal tibia varum
 - Metaphyseal shaft angle

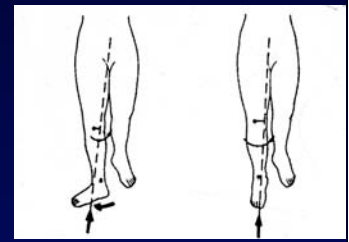
'Corrective of palliative'



Favourable Factors for HTO

- Adduction moment

'Toe out' best



Sport / Running?

- UKA- irresponsible
- HTO



The question is...

NOT osteotomy or UKR!!!

'osteotomy or arthroplasty?'