

Bilateral Total Knee Arthroplasty

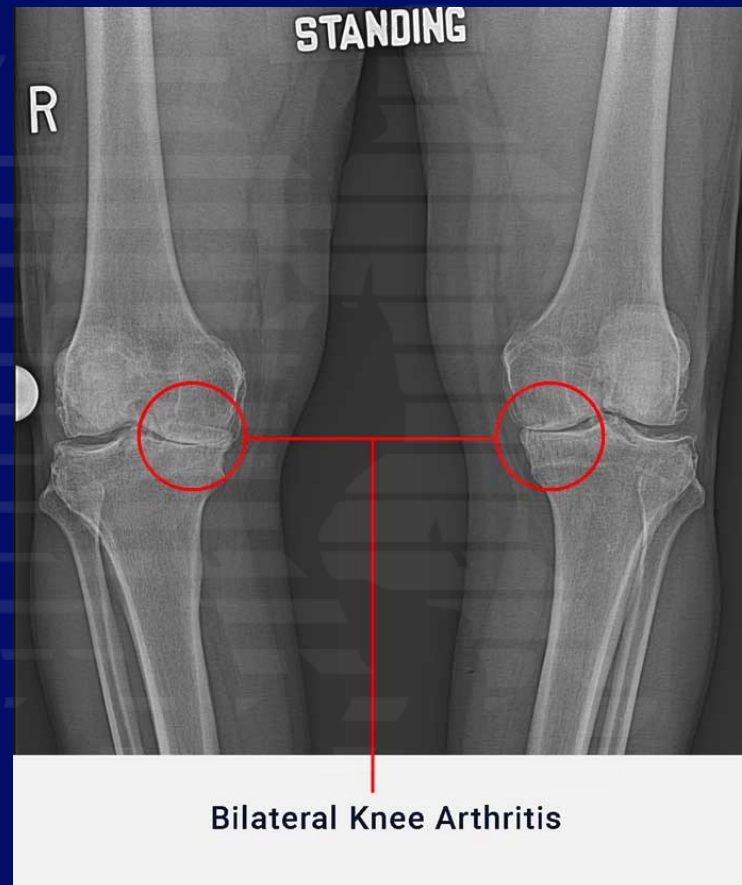


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Why Bilateral TKA



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Patient Factors

- » Sever bilateral disease
- » One operation
- » Decreased rehabilitation time
- » Psychology
- » Complication rate?
- » Cost



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Economic Factors

- » one pre-admission
- » one admission
- » shorter theatre time
- » one rehabilitation admission / outpatient
- » 50% cost reduction



Studies

- » Makaram et al (J. Arthroplasty: 36 2021)
- » meta analysis -29 studies 257284 patients
- » Bilateral TKA vs Staged TKA
- » increased mortality (0.29 vs 0.15%)
neurological comp (0.3 vs 0.2), P.E.
(1.0vs0.74), DVT (2.5 vs 1.8)
- » decreased Superficial (0.3 vs 0.36) and Deep
infection (0.85 vs 1.38)
- » no difference cardiac comp. or revision rates
- » decreased LOS 6.5 days cf 8.6



Studies

- » Kim et al (J.Arthroplasty 2024)
- » Bilateral vs Staggered vs Staged
- » 18,000 Knees 15 year f/u
- » no difference mortality, major or minor comp., clinical outcomes, x rays, revision rate, survivorship



Studies

- » Wyatt et al (ANZ J. Sure:892019)
- » NZ Joint Registry DATA
- » BTKA vs STKA vs UTKA
- » 84,946 knees
- » 30 day mortality BTKA < STKA < UTKA
- » Revision rate BTKA < UTKA
- » 6/12 Oxford scores BTKA > UTKA



Patient Selection



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Patient Selection

- » Philips et al (J. Arthroplasty 2024)
- » Meta analysis
- » Age, CCF, COPD, Pulmonary Hypertension, CRF increased risk
- » BMI equivocal



Patient Selection

- » Wang et al (J.Knee Surg 2020:36)
- » Scoring system
- » Age $>75 +1$, $>82 +2$
- » BMI $>34 +1$, $>42 +2$
- » Hypertension $+1$
- » COPD $+1$
- » CRF $+3$
- » 0- 0.3, 1-0.6, 2-1.6, 3-10.3, 4-9.5, 5-25, 6-99
- » Recommend BTKA 2 and under

Bilateral TKA

- » Safe
- » Predictable
- » Cost effective
- » Patient selection very important



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Thank You



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