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ORIGINAL ARTICLE

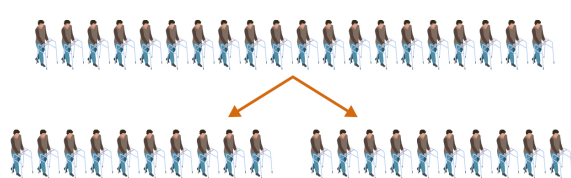
Postoperative Pain and Blood Loss of Non-use Compared to Partial-use of a Tourniquet in Bilateral Total Knee Replacement: A Randomized-Control Trial

Performing total knee arthroplasty (TKA) without using a tourniquet, can reduce particularly the magnitude difference in pain and postoperative wound complications better than using the tourniquet as well as lack of significant differences in blood loss.

"Cross over RCT Design"



20 patients
with bilateral severe OA knee



1st Operation **NTU**
2nd Operation **BOO**

3 Months Apart

BOO
NTU

6 Techniques

of tourniquet use in TKA.
We aim to compare 2 techniques.

	Skin incision	Osteotomy	Cementing	Skin closure
NTU				
BOO				
MO				
FHO				
SHO				
TTO				

NTU: No-tourniquet usage in operation

BOO: Before osteotomy in operation

MO: Mid-way into the operation

FHO: During the first half of operation

SHO: During the second half of operation

TTO: Throughout the operation

Results and Conclusion

	NTU	BOO
Pain	↓	↑
Blood loss	↔	↔
Postoperative complication	↓	↑
Operative time	↔	↔

The conclusion from this crossover RCT is that NTU provides better pain relief compared to BOO. The NTU group did not experience more blood loss than the BOO group, and the BOO group had one serious complication (DVT), and four wound complications (ecchymosis).

SCAN FOR
FULL TEXT



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