There is an increase in morbid obesity as well as demand for total knee arthroplasty (TKA).

The purpose of this study was to evaluate the perioperative safety of operating on this population.

Morbidly obese individuals may benefit from the successes of the morbidly obese population.

This table includes clinical, operative, and postoperative variables comparing unilateral and bilateral TKA in the morbidly obese.

Table 1: Morbidly Obese TKA Comparisons. This table includes clinical, operative, and postoperative variables comparing unilateral and bilateral TKA in the morbidly obese.

Table 2: Comparison of Morbidly Obese TKP Complications. This table shows complications in unilateral and bilateral TKA in morbidly obese patients.

Table 3: Comparison of Non-obese and Morbidly Obese Bilateral TKA Comparisons. This table compares complications of bilateral TKA between non-obese and morbidly obese patients.

Table 4: Comparison of Non-obese and Morbidly Obese Bilateral TKA Comparisons. This table includes clinical, operative, and postoperative variables comparing bilateral TKA in the non-obese and morbidly obese.

Clinical variables (Table 1) were similar between the morbidly obese population.

The bilateral group (Table 1) had significantly increased operative times, intravenous fluids, patients transfused, days in the hospital, and discharge rate to rehabilitation facility.

The morbidity obese groups were also very similar in terms of final knee range of motion (ROM) at the final follow-up evaluation.

Major and minor complications (Table 2) were few and comparable with no need for manipulation under anesthesia in unilateral TKA as the only significant difference between groups.

When comparing the non-obese and morbidly obese patients undergoing bilateral TKA (Table 3), the non-obese group had a significantly shorter operative time, lower ASA scores, increased knee ROM, but a higher percentage transfused.

There was one major complication (Table 4) in both obese and non-obese bilateral TKA groups, but no deep infections. The non-obese group had non-significantly more complications.

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There is an increase in morbid obesity as well as demand for total knee arthroplasty (TKA).

The purpose of this study was to evaluate the perioperative safety of operating on this population.

For those with bilateral knee arthritis, physicians must help patients make an informed decision as to performing staged, sequential, or simultaneous total knee arthroplasty and be aware of the safety of operating on this population.

We are not aware of any published studies on simultaneous TKA in the morbidly obese population.

The purpose of this study was to evaluate the perioperative complications of two-team simultaneous bilateral TKA in the morbid obesity.

Methods

• After IRB approval, we performed a retrospective review of the records at a single tertiary hospital from 1997-2007 and identified 35 morbid obesity (BMI ≥40) patients who had undergone unilateral TKA, as well as 42 morbid obesity and 79 non-obese (BMI<30) who underwent simultaneous bilateral TKA.

• Clinical, operative, and postoperative variables (Table 1, Table 3) were recorded along with complication rates (Table 2, Table 4).

Conclusion

Morbidly obese individuals may benefit from the successes of total joint arthroplasty, though they and their surgeon should be aware of the risk.

We feel that 2-team simultaneous bilateral TKA carries a low morbidity and mortality in the morbid obesity population and that the benefits of improved function in those with bilateral knee disease and desire to undergo one simultaneous surgery.

Our data support that there is only an increase in transfusion demand in those undergoing simultaneous TKA, but with several other potential benefits.

References

