A Supine Achilles Tendon Repair Decreases Total Operating Room and Anesthesia Time Without Sacrificing Outcomes

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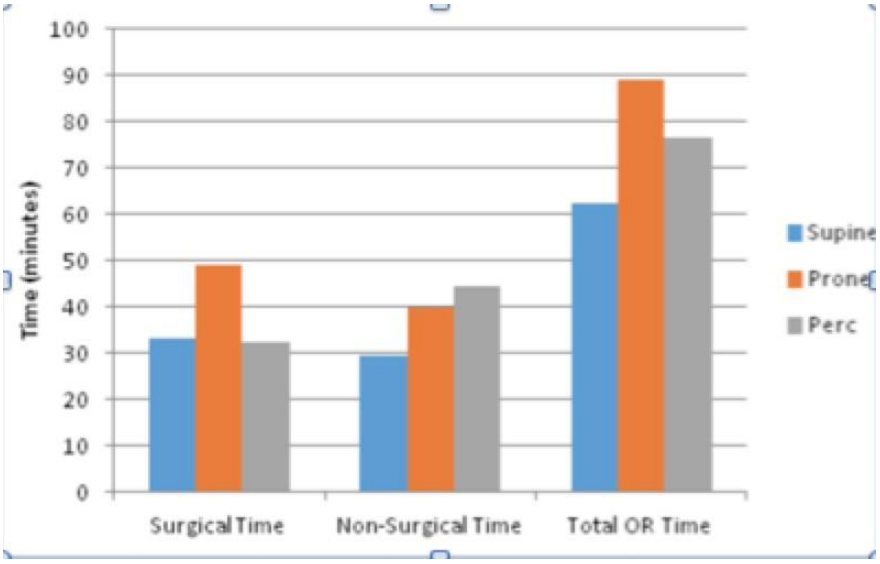
Introduction/Purpose: Achilles tendon repairs have traditionally been performed using a prone position. Prone positioning gives the surgeon easy visualization of the tendon, but may not offer the safest position for anesthesia and requires more peri-operative positioning time. We propose that the use of a supine position for primary Achilles tendon repairs offers similar surgical times, while saving non-surgical operating room time during positioning and anesthesia set-up.

Methods: A retrospective review of primary Achilles tendon repairs done at our institution's surgical sites between March of 2010 and July of 2015 was performed. Using the institutional database, 145 procedures were identified. Chart review demonstrated that 82 were performed open-supine (OS), 31 were performed open-prone(OP), and 32 were performed percutaneous-prone(PP). Surgical, non-surgical, and total operating room times were compared between the three groups.

Results: Average surgical times were 32.8, 49, and 32.3 minutes for the OS, OP, and PP procedures, respectively. Total operating rooms times were 59.1, 88.9, and 76.7; while non-surgical times spent in the operating rooms were 26.3, 39.9, and 44.4 minutes for these groups, respectively. Achilles tendons repaired either OP or PP resulted in an additional 13.6 and 18.1 (average 15.9) minutes of operating room time. There was not an increase in complications with the supine procedure compared to the prone procedures.

Conclusion: Primary Achilles tendon repairs can be performed effectively using an open technique in a supine position, saving non-surgical operating room time without increasing complications. The supine position may also offer a safer method of providing anesthesia to these patients by allowing the anesthesiologist a more accessible airway and decreasing the risks involved with placing an intubated patient into a prone position.



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