Background

Both orthopedic surgeons and plastic surgeons operate on the hand. There are extensive differences in training, scope of practice, and clinical spectrum of patients when comparing residency training programs. Comparable studies have shown significant differences in outcomes of other specialties.

The aim of this study was to compare outcomes after surgical procedures of the hand, between orthopedic surgeons and plastic surgeons.

Methods

A retrospective analysis of the American College of Surgeons National Surgical Quality Improvement Program (NSQIP) database was performed between 2005-2016, identifying all patients undergoing hand surgery. Current Procedural Terminology codes were used to categorize procedures into three groups: fracture repair, tendon repair, and amputation.

Post-operative complications, operating time, and length of hospital stay were analyzed and compared.

Results

A total of 16,448 cases were identified. Of these, 10,456 were operated upon by orthopedic surgeons and 5,992 were operated upon by plastic surgeons.

Plastic surgeons had higher operative times in amputation procedures, but lower operative times in fracture repair and tendonoplasty procedures. Post-operative complication rates were slightly higher in fracture repair by plastic surgeons, mainly driven by wound complications.

Conclusion

This study shows similar outcomes after tendinoplasty, fracture repair, and amputation when comparing orthopedic and plastic surgery.

Future outcome comparison studies should investigate other anatomical regions and procedures for which overlap of services exists.