The Prevalence and Practice Patterns of Anterior Interosseous Nerve to Ulnar Motor Nerve Transfer Use: A Survey of Hand Surgeons

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Case Report

Nerve transfers have become increasingly popular but current adoption of new techniques and their current coding practices have yet to be studied.

Methods and Materials

A twenty-question electronic survey of hand surgeons was performed to evaluate comfort with and coding of anterior interosseous nerve to ulnar motor nerve transfer.

Figure 1

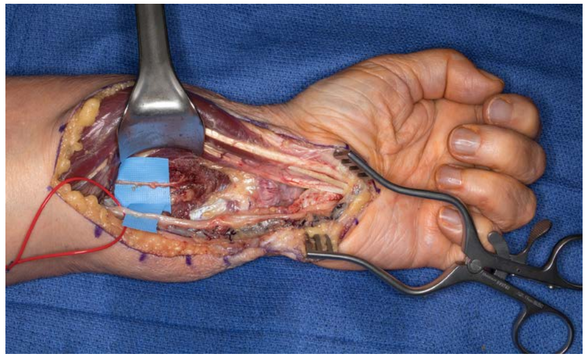
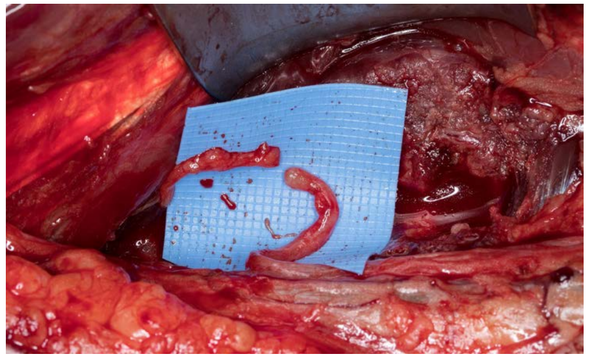


Figure 2



Results

Of the 461 respondents, the majority were trained in orthopedic surgery (76%) or plastic surgery (19%). There was a wide range of years in practice with 38% practicing less than 10 years, 24% practicing 11-20 years, and 36% practicing for more than 20 years. For those who completed a fellowship, 98% completed a hand surgery fellowship, 11% completed a peripheral nerve fellowship, and 7% completed a different fellowship. There was a significant difference in the use of nerve transfer depending on the type of practice (p=.0001) and number of years in practice (p=.0001), but not the volume of nerve cases per month (p=0.3356).

The survey included a scenario of a high ulnar nerve lesion, no expectation of nerve regeneration, and plan for an end-to-end anterior interosseous nerve to ulnar motor nerve transfer. 53.7% were comfortable with the above nerve transfer, whereas 46.3% were not. Of the surgeons who were comfortable with the nerve transfer, the majority (69.5%) rated intraoperative complexity as the highest possible (5/5). When asked the Current Procedural Terminology (CPT) code they would use for the above procedure, the most common response was 64905 (first stage of nerve pedicle transfer, 45.5%) followed by 64856 (Suture of major peripheral nerve, arm or leg, except sciatic; including transposition, 31.7%).

Conclusions

Over 46% of hand surgeons were uncomfortable performing an anterior interosseous to ulnar motor nerve transfer and the majority rated the procedure as having the highest possible intraoperative complexity. There was no consensus on CPT coding for the nerve transfer.