Abstract

- The purpose of our study was to investigate the preferred operative procedures that are performed by hand surgeons for cubital tunnel syndrome. The survey consisted of 6 case-based scenarios and was sent to members on the American Society for Surgery of the Hand (AASH) listserv. 137 surgeons completed the survey. Simple decompression was chosen by the majority of surgeons as their preferred treatment for cubital tunnel syndrome.

Background

- Cubital Tunnel Syndrome (CuTS) is a common compression neuropathy affecting the upper extremity. Treatment options for CuTS vary, but there is considerable debate over which procedure should be performed for varying degrees of severity. The purpose of our study was to determine, based upon survey responses, how physicians are treating patients with CuTS. We then integrated the results with current literature.

Methods

- We surveyed physicians on the ASSH listserv. They were presented with 6 hypothetical cases and asked to choose their preferred treatment from the following options: open in situ decompression, endoscopic decompression, submuscular transposition, subcutaneous transposition, medial epicondylectomy, and conservative management. This was assessed independently and anonymously through an online survey (SurveyMonkey).

Results

1. Your patient presents with mild occasional paresthesias of the ring and small fingers with subjective weakness for greater than 6 months. Tinel’s sign and elbow flexion test are positive. The patient has no demonstrable weakness. EMG/NCV and sensory exam are normal. What is your preferred treatment?

2. Your patient presents with moderate paresthesias and sensory deficits of the ring and small fingers for greater than 6 months. There is obvious weakness of the extrinsic musculature. Tinel’s sign and elbow flexion test are positive. EMG/NCV suggests severe ulnar nerve entrapment at the elbow. What is your preferred treatment?

3. Your patient presents with severe constant paresthesias and sensory deficits of the ring and small fingers for greater than 6 months. Sensory deficit with TPD of 5mm is present. There is interosseous muscle atrophy with profound weakness. Tinel’s sign and elbow flexion test are positive. EMG/NCV suggests severe ulnar nerve entrapment at the elbow. What is your preferred treatment?

4. Your patient presents with severe constant paresthesias and sensory deficits of the ring and small fingers for greater than 6 months. Sensory deficit with TPD of >10mm is present. There is interosseous muscle atrophy with profound weakness. Tinel’s sign and elbow flexion test are positive. EMG/NCV suggests severe ulnar nerve entrapment at the elbow. What is your preferred treatment?

5. Your patient presents with severe constant paresthesias and sensory deficits of the ring and small fingers for greater than 1 year. Sensory deficit with TPD of >10mm is present. There is interosseous muscle atrophy with profound weakness. Tinel’s sign and elbow flexion test are positive. EMG/NCV suggests severe ulnar nerve entrapment at the elbow with positive waves and fibrillations.

6. Your patient presents with severe constant paresthesias and sensory deficits of the ring and small fingers for greater than 1 year. Sensory deficit with TPD of >10mm is present. There is interosseous muscle atrophy with profound weakness. Tinel’s sign and elbow flexion test are positive. EMG/NCV suggests severe ulnar nerve entrapment at the elbow with positive waves and fibrillations. In addition, the patient has significant medical comorbidities including CAD, CKD, and uncontrolled DM. What is your preferred treatment?

Conclusion

- This is the first study to survey hand surgeons on their preferred treatment for CuTS. Our survey results indicate that open in situ decompression is the preferred operative procedure amongst hand surgeons for CuTS regardless of severity.

References