The characteristics of female cubital tunnel syndrome patients

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**Background**

Cubital Tunnel Syndrome (CuTS)

Second most common compression neuropathy in the upper extremity after carpal tunnel syndrome (CTS)

Prevalence: 25 cases per 100,000

Causative Factors

Osteoarthritis (OA), Constriction of arcuate ligament of Osborne, Subluxation of the ulnar nerve, Arcade of Struthers

Unlike CTS, which mainly affect females, male is considered as a risk factor for CuTS

**Objective**

To identify the prevalence and the characteristics of female CuTS patients.

**Patients and Methods**

**Patients**

99 patients diagnosed as CuTS by clinical and electrophysiological examination

Operated with neurolysis alone or with epicondylectomy

Factors reviewed

- Prevalence of OA using plain radiographic
- Motor conduction velocity (MCV)
- The cause of CuTS
- Initial severity of CuTS

Comparison between male and female

**Results**

**Demographics**

<table>
<thead>
<tr>
<th>Gender</th>
<th>Cases</th>
<th>Prevalence</th>
<th>Average age</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>79</td>
<td>79.8%</td>
<td>59.2±1.5</td>
</tr>
<tr>
<td>Female</td>
<td>49</td>
<td>20.2%</td>
<td>64.8±2.5</td>
</tr>
</tbody>
</table>

**Gender**

Data on OA

- OA
- Post fracture
- Constriction by Osborne lig

**McGowan’s classification**

- McGowan 1
- McGowan 2
- McGowan 3

**MCV**

- Female: 30 (m/s)
- Male: 40 (m/s)

\* P<0.05

**Discussion**

Prevalence of female CuTS patients in the state of Florida

52%  Adkinson et al., JHS (A) 2015

Prevalence of female CuTS patients in the Siena (Italy)

½, in comparison with males  Mondelli et al., J. Neurol. Sci 2005

Does our lower incidence reflex cultural or ethnical difference?

**Characteristics of female CuTS patients**

Lower incidence (20.2%)

Significantly fewer cases due to OA

Significantly higher age onset

No difference in the severity of CuTS