INTRODUCTION

- We prospectively evaluated the sensitivity (Sn), specificity (Sp), and inter-rater reliability (κ) of the scratch collapse test (SCT).

MATERIALS AND METHODS

- Subjects recruited from patients referred for upper extremity nerve conduction studies.
- SCT performed by two blinded observers.
- Sn and Sp calculated with two different reference standards:
  i) Electrodiagnostics (EDx)
  ii) CTS-6 (a validated clinical tool)

RESULTS

- 170 wrists and 139 elbows studied
- Sn and Sp for the two primary observers summarized in Table 1
- κ was -0.025 (worse than chance alone) for the resident/tech 1 and 0.211 (fair) for the resident/tech 2

CONCLUSIONS

- Sn and Sp for the SCT were lower than those found in non-blinded studies.
- κ ranged from worse than chance to fair, highlighting the operator-dependent nature of the maneuver.
- These results call into question the diagnostic utility of the SCT for carpal and cubital tunnel syndromes.

<table>
<thead>
<tr>
<th>SCT wrist, EDX standard</th>
<th>SCT wrist, clinical standard (CTS-6)</th>
<th>SCT elbow</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sensitivity (95% CI)</strong></td>
<td><strong>Specificity (95% CI)</strong></td>
<td><strong>Sensitivity (95% CI)</strong></td>
</tr>
<tr>
<td>Resident</td>
<td>7% (3-14%)</td>
<td>78% (68-86%)</td>
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<tr>
<td>Tech 1</td>
<td>7% (3-14%)</td>
<td>94% (86-97%)</td>
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EDX: electrodiagnostic testing; CTS-6: Carpal Tunnel Syndrome 6