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**Introduction**

Crucial to any investigation is the reliability and precision of the outcome measure. This is especially true when multiple investigators are involved.

Facial nerve clinical studies have languished because of outcome measures lacking precision and reliability between raters.

The purpose of this study was to test the reliability of two grading systems used as outcome measures in facial nerve research.

**Methods and Materials**

30 subjects’ facial video images were selected from the facial nerve center archives meeting criteria of being able to be scored by the two test systems and having a wide range of facial paralysis.

Two trained, but naive raters, rated each subject twice by the House-Brackmann 6-level ordinal scale system and twice by the Sunnybrook (SB) quasi-dimensional system allowing a continuous variable measure between 0-100 and twice again using a checklist to enhance precision of the Sunnybrook.

**Results:**

Comparison between two scales

Intra-observer Reliability (SB) with and without enhancing checklist (SB-CL)

Indicates the large amounts of variability present in the House-Brackmann scale as compared to Sunnybrook composite scores.

ICC’s showed increase with the introduction of the checklist supplement, an indication of better reliability.

**Conclusion**

1) House-Brackmann (wt-k= 0.815, 0.777) - good intra-observer reliability

2) Sunnybrook (Inter-observer ICC=0.903) - excellent reliability

3) Checklist improves SB (Inter- observer ICC=0.930)