

A PROSPECTIVE ASSESSMENT OF SRS-24 SCORES AFTER ENDOSCOPIC ANTERIOR INSTRUMENTATION FOR SCOLIOSIS

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INTRODUCTION

Endoscopic instrumentation for scoliosis has several advantages compared with open procedures. The purpose of our study was to prospectively assess the clinical outcome of patients after endoscopic anterior instrumentation and to evaluate their responses over time.

METHODS

A total of 83 consecutive patients underwent endoscopic instrumentation performed at a single unit. Patients completed the SRS-24 Outcomes Instrument pre-operatively and at 3, 6, 12 and 24 months post-operatively. The seven domains of the SRS-24 score were compared between each of the follow-up intervals. The dataset contained 24 responses at 3 months, 65 responses at 6 months, 63 responses at 12 months and 49 responses at 24 months.

RESULTS

There were 74 females and nine males with a mean age of 16.4 years (range, 10 to 46 years). The mean Cobb angle improved from 52.8 degrees pre-operatively to 21.9 degrees post-operatively. Over the follow-up period there were significant improvements in the activity level ($p < 0.05$), function from back condition ($p < 0.05$) and post-operative function ($p < 0.01$) domains. Most of this improvement occurred during the first post-operative year and none of the domains improved further after this time interval. There was no significant change in the pain, self image and patient satisfaction domains.

DISCUSSION

Our results for endoscopic scoliosis correction are comparable with those reported for open procedures. The greatest improvement in SRS scores occurred between six and twelve months post-operatively. The SRS-24 scores at one year from surgery may provide a good indicator of patient outcome in the long-term.