

# How will I see my body after surgery? Comparison of the Trunk Appearance Perception Scale before and after surgical treatment of adolescents with idiopathic scoliosis

Patryk Wiliński, Katarzyna Politarczy Politarczyk, Tomasz Kotwicki  
Department of Spine Disorders and Pediatric Orthopaedics, University of Medical Sciences, Poznań, Poland

**Introduction.** Adolescents with idiopathic scoliosis (IS) commonly experience concerns regarding their body appearance. To assess their perception of trunk deformity, the Trunk Appearance Perception Scale (TAPS) is used as a self-evaluation tool.

**Objective.** This study aims to assess the immediate effect of surgical treatment on the perception of body deformity in adolescents with IS using the TAPS.  
Study design. A retrospective study of prospectively collected data.

**Methods.** The study included 37 patients with IS (33 girls, 4 boys), aged 12–18 who completed the TAPS questionnaire 1–2 days before and 6–7 days after surgical correction of idiopathic scoliosis.

**Results.** The mean postoperative Cobb angle values in both the thoracic and the lumbar curvature were significantly lower compared to the preoperative values (thoracic  $24.8^\circ \pm 11.9$  vs  $58.3^\circ \pm 16.3$ ,  $p < 0.001$ ; lumbar  $16.1^\circ \pm 9.9$  vs  $43.3^\circ \pm 11.4$ ,  $p < 0.001$ ). The percentage of correction was  $57.02\% \pm 17.43$  and  $63.76\% \pm 18.62$ , for the thoracic and the lumbar curvature, respectively. The TAPS score decreased from 3 preoperatively to 1 postoperatively (the mode of the score) concerning the posterior and the bending forward view, while it decreased from 3 to 2 for the anterior view. There was a significant difference between pre- and postoperative TAPS scores ( $p < 0.001$ ). However, no relation was found between the surgical curve correction in degrees or percentages versus the postoperative TAPS score for the anterior, posterior, or forward bending view ( $p > 0.05$ ).

**Conclusions.** The short-term cosmetic effect of surgical IS treatment improves patients' perception of trunk deformity, regardless of the degree of Cobb angle correction.