

ADOLESCENT IDIOPATHIC SCOLIOSIS: PATIENTS' PERCEPTION AND SATISFACTION ON NECK AND SHOULDER IMBALANCE

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Background:

Adolescent Idiopathic Scoliosis (AIS) patients' perception and satisfaction on their clinical neck and shoulder imbalance are important.

Objective:

To assess the quality of life of those patients with neck and shoulder imbalance after PSF.

Methods:

120 Lenke 1 and 2 AIS patients were stratified into 3 groups (40 patients each): Balanced (B), Lateral shoulder imbalance (LSI) (>20mm), and Neck tilt/medial shoulder imbalance (NT) (grade 3). Patients in each group were further divided into 2; 20 preoperative and 20 postoperative patients. They were interviewed using Modified Neck/Shoulder Appearance and SRS-22r questionnaire. Radiological parameters (T1 tilt, Cervical Axis (CA), Clavicle angle (Cla-A), Radiographic shoulder height (RSH)) were measured and analyzed.

Results:

The NT patients were aware of their abnormal neck/medial shoulder appearance and were significantly unhappy with their neck/medial shoulder appearances ($p < 0.001$) as compared to B and LSI groups. Similarly, the LSI patients were aware of their abnormal lateral shoulder appearance and were significantly unhappy with the appearance ($p < 0.001$) as compared to the B and NT groups. Group B post-op patients had higher overall scores (4.2 ± 0.3 , $p = 0.001$), self-image (4.0 ± 0.5 , $p < 0.001$) and satisfaction (4.4 ± 0.5 , $p = 0.003$) domains compared to preoperatively while preop LSI Group scored the lowest in these three domains compared to other groups (3.5 ± 0.4 , 2.4 ± 0.5 and 3.3 ± 0.5).

Conclusion:

LSI and NT groups were aware and unhappy with their appearances. NT group had a larger T1 tilt and CA whereas LSI group had larger Cla-A and RSH respectively.