

언어구분	KOR	논문구분	원저/구연	논문분야	척추
논문제목	척추 측만증 교정 수술 후 <b>shoulder balance</b> 에 영향을 미치는 요인 분석				
영문제목	<b>Analysis of factors that affect shoulder balance after correction surgery in scoliosis</b>				
발표자	한지훈	책임저자	홍재영		
저자	홍재영, 서승우, Hitesh N Modi, 양재혁, 박시영, 한지훈				
기관명	고려대학교 안산병원 정형외과, 고려대학교 구로병원 정형외과, 고려대학교 안암병원 정형외과				

**서론** : Shoulder imbalance is a well-known characteristic of AIS. However, no factors have previously been established to be related to shoulder balance in various types of curvatures after correction surgery.

**재료 및 방법** : Shoulder imbalance is a well-known characteristic of AIS. However, no factors have previously been established to be related to shoulder balance in various types of curvatures after correction surgery.

**결과** : In general, all the 4 shoulder parameters were slightly increased at final follow up (T-test,  $P < 0.05$ ), although there was a decrease in Lenke type II and IV curvatures. However, pre- and postoperative values and changes in shoulder parameters were not significantly different for all the curvature types (ANOVA,  $P > 0.05$ ). Moreover, there existed no significant differences of pre- and postoperative shoulder level between different level of proximal fusion groups (ANOVA,  $P > 0.05$ ). In the analysis of coronal curvature changes, no difference was observed in the pre- and postoperative magnitude, and changes in every individual coronal curvatures between improved shoulder balance and aggravated groups ( $P > 0.05$ ). However, the middle to distal curve change ratio was significantly lower in patients with aggravated shoulder balance ( $P < 0.05$ ). In addition, patients with smaller preoperative shoulder imbalance showed the higher chance of aggravation after surgery with similar postoperative changes ( $P < 0.05$ ).

**결론** : Significant relations were found between correction rate of middle, and distal curvature, and postoperative shoulder balance. In addition, preoperative shoulder level difference can be a determinant of postoperative shoulder balance. The present study shows that balanced correction of coronal curvature with due consideration of initial shoulder level is important to create shoulders that are more balanced.

**acknowledgment** : .

Adolescent idiopathic scoliosis, Shoulder balance, Correction surgery