

SURGICAL TREATMENT OF THE ADHESIVE INTERSTITIAL OBSTRUCTION IN CHILDREN

Khaschuk V.S. Bodnar O.B., Basisty S.I., Ungurian A.M.

Bukovinian state medical University, Chernivtsy, Ukraine

Introduction. Adhesive intestinal obstruction (AIO) is one of the most difficult and unsolved problems of the abdominal surgery in children.

Aim of the study. To explore the possibility of using hyaluronic acid solution for the treatment of intraperitoneally adhesions in children.

Methods. 84 children were operated on AIO. The children were divided into two groups. HAS was not used in I group (56 patients). HAS was used in II group (28 patients). The follow-up of children from 1 to 4 years.

From 84 patients on AIO: 21 (25 %) operated on for early adhesive intestinal obstruction, 63 (75 %) – on late adhesive intestinal obstruction. Recurrent AIO was in 12 (14,29 %) children.

Results. In the I group (56 children) in the first year after surgery with adhesion syndrome turned 13 (23,21 %) children, up to 4 years - 20 (35,71 %) patients. In the II group (28 children) adhesion syndrome (cured conservatively) over 3 years postoperative period turned 2 (7,14 %) patients, indicating the effectiveness of hyaluronic acid solution for the purpose for treatment of the adhesions abdominal cavity in children.

Conclusion. The hyaluronic acid solution is effective in the treatment of adhesive intestinal obstruction in children and is accompanied by a recurrence of the adhesion syndrome 7,14 % (n=28 children) on the difference in the group without using it – 35,71 % (n=56 children).

SMITH-PETERSEN OSTEOTOMY EFFECTIVENESS COMPARED TO ANTERIOR RELEASE PROCEDURES IN SURGICAL TREATMENT OF LENKE TYPE I IDIOPATHIC SCOLIOTIC DEFORMITIES

Kolesov S.V, Shvets V.V., Sazhnev M.L., Panteleyev A.A., Kazmin A.I.

N.N. Priorov Central Institute of Traumatology and Orthopedics, Moscow, Russia

Introduction: rigid idiopathic scoliosis deformities are traditionally treated using a two-stage approach. However, multilevel Smith-Petersen osteotomies allow to mobilize the main curve and to omit the anterior release stage.

Materials and methods: the results of 72 patients aged from 14 to 21 years with an idiopathic scoliosis of Lenke type I and angle of deformity from 70° to 90° (average angle 81.3°) were analyzed. In 35 patients, one-stage treatment was performed in combination with multilevel Smith-Petersen osteotomies. In 38 patients – two-stage operative treatment (anterior release + posterior fusion) was performed. In all patients, the deformities were rigid (correction of less than 25% with the traction test). All patients were examined radiographically. Radiographs were performed right after surgery and 3, 6 and 12 months after surgery.

Results. In-group I the average degree of deformity was 72.67 °. The mobility of the main curve in all cases was below 25%. All patients underwent SPO (from 5 to 8 levels). Correction and fixation were carried out using hybrid and screw instrumentation. The average correction angle was 49.94 ° or 68.7%. In-group II the average degree of deformity was 73.92°. The mobility of the main curve was below 25%. All patients underwent anterior release (4 to 6 levels of discectomy). Over the next 7-14 days, halo-gravity traction was carried out. The second stage was performed using posterior correction and fusion using hybrid or screw instrumentation. The average correction angle was 48.73°, or 65.9%.

Conclusion: the use of Smith-Petersen osteotomy in patients with rigid idiopathic Lenke type I scoliosis with a degree of deformity between 70° and 90° allows for one-step correction that yields comparable results with two-stage surgical treatment. The number of SPO levels should be at least 5.