

## **SII10: LAPAROSCOPIC REDO FUNDOPLICATIONS IN CHILDREN**

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**Background** Laparoscopic fundoplication is still controversial in patients with recurrent GERD who underwent surgery. The aim of this study was to assess the feasibility and efficacy of laparoscopic redo fundoplication and causes of recurrence.

**Materials and methods** In period 2000-2015 laparoscopic fundoplication was performed in 311 children (158 girls and 153 boys) in age from 3 months to 18 years (average 9.4 years). 17 (5.5%) patients (4 girls and 13 boys) required re-operation for recurrent GERD and/or symptomatic hiatal hernia. All re-operations were performed with laparoscopic technique. Redo was performed 0.5 to 13 years (average of 4.2 years) after the previous antireflux surgery. Intraoperatively in 10 (58.8%) patients rupture of hiatal crura and sliding hernia, in 5 (29.4%) sliding hernia and wrap disruption, in 1 (5.8%) wrap disruption and 1 (5.8%) paraesophageal hernia with normal wrap location were recognized. In all patients hiatal crura were re-stitched and in 10 (58.8%) strengthened using synthetic mesh. Nissen refundoplication was performed in 14 patients, Toupet in 3.

**Results** There were no intraoperative complications and conversion. Postoperative course was uneventful in all patients. In all good result was achieved and postoperative control 24-hours pH-metry confirmed the effectiveness of reoperation. Two neurologically impaired patients died due to general health conditions.

**Conclusions** The main cause of GERD recurrences is a crura disruption and sliding hernia so important is to pay special attention to the proper suturing of crura during first operation. Laparoscopic redo fundoplication is feasible, effective, but difficult technically. The use of mesh to strengthen crura seems to be reasonable and prevents further recurrences.

**Key words** GERD, laparoscopic redo fundoplication, children