

**SURGICAL TREATMENT OF CHEST FUNNEL BY NUSS PROCEDURE - A 15-YEAR EXPERIENCE STUDY.**

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**Background.** Chest funnel is the most common congenital malformation of the anterior chest wall. The aim of this study was to analyze complications and difficulties of pectus excavatum surgery by Nuss procedure.

**Material and Methods:** 239 patients with pectus excavatum treated surgically between 2002-2016 were analyzed.

**Results:** The study contained people aged 14-34 years. The postoperative complications were observed in 39/239 (16.3%) cases. The most common complication after surgery was pneumothorax - 14/239 cases (5.9%). We observed also 4 cases of wound infection (1.7%), 3 cases of pleural effusion (1.3%), 1 case of nickel allergy (0.4%), 1 case of lung atelectasis (0.4%) and 1 severe right ventricular failure (0.4%). Three patients (1.3%) were treated because of severe postoperative pain and in one case an implant had to be removed.

No significant differences were found between complication rate and sex or age (under and over 18 years) ( $p > 0.05$ ). Satisfactory and permanent effect of correction was observed in 231/239 (96.7%) cases. Recurrence of malformation required reoperation. There wasn't observed operative mortality.

**Conclusions:** Nuss procedure is a safe method for patients with excellent and long-term esthetic results, but surgeons should be aware of low risk of severe complications and recurrence of deformity.