Necessity for reoperations in treating otitis media with effusion (OME) results mainly from the protracted course of the disease itself but also from the negative sequelae of the treatment with ventilation tubes.

The aim of the study was evaluation of number and type of surgeries performed on children treated with ventilation tubes (VT).

Methods
The study was retrospective and involved two groups of children:

GROUP 1: 259 children who underwent 357 surgical procedures in the years 2003-2005. Mean age during the first operation was 7.36 years (median 7, range 1-18 years). Ventilation tubes were inserted for the first time in 84% of patients, for the rest of patients (16%) this procedure were performed before at least once. VT were placed bilaterally in 77.6%, unilaterally in 22.4% of patients. 16% of children required tympanoplasty operations.

Group 1. Number of VT placements in the 1st group

Otological surgeries in the 1st group:
- 4 myringoplasties (tympanic membrane perforations caused by VT)
- 9 tympanoplasties (retraction pockets)
- 3 tympanoplasties caused by cholesteatomas

Group 1. Age difference (younger and older children)

≤5 years old – 90 children

≥6 years old – 169 children

GROUP 2: 727 children treated surgically (ventilation tubes) in the years 2009-2011. Ventilation tubes were inserted for the first time in 89% of children, in 11% of patients they were placed at least one time before. VT tubes were placed unilaterally in 22.7% of patients, bilaterally in 77.3% of patients. Mean age during the first operation was 5.8 years (median 5, range 1-18 years).

Group 2. Number of VT placements in the 2nd group

Otological surgeries in the 2nd group:
- 4 myringoplasties (tympanic membrane perforations caused by VT)
- 5 tympanoplasties (retraction pockets)
- 3 tympanoplasties caused by cholesteatomas

Conclusions:
- 26% of children required more than one insertion of ventilation tubes.
- Children with unilateral OME more often required reoperations.
- The need for otologic surgery increased with the period of observation after first VT insertion.