

## SVIII8: RE-DO THORACOSCOPIC PATCH REPAIR IN CONGENITAL DIAPHRAGMATIC HERNIA (CDH)

Laszlo Sasi Szabo\*<sup>1</sup>, Levente Szabo<sup>1</sup>

E-mail: Laszlo Sasi Szabo — [sasi.szabo.laszlo@med.unideb.hu](mailto:sasi.szabo.laszlo@med.unideb.hu)

<sup>1</sup>Research Institute of pediatric surgery of the Russian State Medical University, <sup>2</sup>Speransky childrens Hospital, Moscow, Russian Federation; <sup>2</sup>Speransky childrens Hospital, Moscow, Russian Federation

**Background** The defect of the diaphragm in CDH can usually be closed primarily but prosthetic patch repair may be necessary when the defect is large. Thoracoscopy provides in excellent choice for primary diaphragmatic closure although it has a proven higher rate of recurrency. The best method for recurrent CDH treatment is still under debate. We present our single-institute experience with re-do thoracoscopic patch repair.

**Materials and methods** Between 2013 and 2016 we performed thoracoscopic repair in 9 patients with CDH. 8 were left-sided, one defect was on the right side. In 5 patients we used Gore-Tex mesh for prosthesis, In 4 left-sided hernias the defect was small and was easy to close primarily. Despite of the favourable situation, we observed two recurrences in the latter group: one in the 8th postoperative day, and one 3 months following surgery.

**Results** In both recurrent CDH cases we performed a re-do thoracoscopy. The defect developed in the postero-lateral portion of the suture line. In both cases a Gore-Tex mesh with an appropriate extent was placed in the defect and was sutured to the diaphragmatic muscle and to the ribs. Both patients had an uneventful postoperative course and are free of any recurrence after 35 and 28 months following the second surgery.

**Conclusions** Thoracoscopic repair is an accepted method of CDH repair although is considered to have higher incidence rates, especially when placement of a prosthetic patch is needed. The treatment of choice in recurrent CDH is controversial, but we suggest that re-do thoracoscopy provides an excellent option for secondary repair as well. Taking this into consideration we think that the benefits of VATS CDH repair outweigh its known disadvantages and should be used as a first choice for surgery.

**Key words** CDH, re-do thoracoscopy, prosthetic mesh