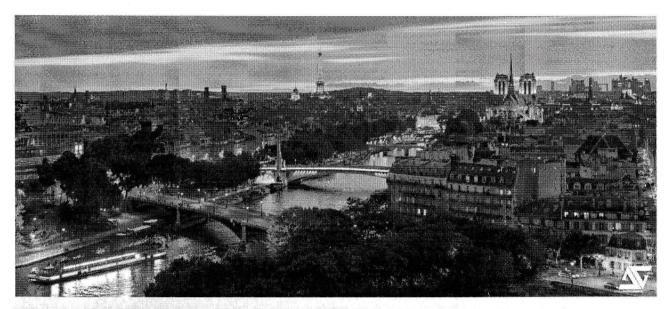
## EUPSA 2@18

### European Paediatric Surgeons Association



# **ABSTRACT BOOK**

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#### SCV-TH09

### CORRECTION OF FUNNEL CHEST USING SELF DESIGNED SINGLE-COMPONENT T-SHAPED METAL BAR WITH EXTRA PLEURAL PLACEMENT UNDER CONTROL OF SUBXIFOIDAL WINDOW

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Aim: to optimize the minimally invasive treatment of Funnel chest (FC) using a self designed singlecomponent T-shaped metal bar.

**Methods:** From 2001-2017 we treated various variants of FC in 168 children aged 6 months to 18 years with technique of Nuss. T-shaped bar with a leading wedge-shaped end was used in 121 and Lorentz-bar in 33, both bars at the same time in 10, and in stages in 4. A subxifoidal window was used for controlling the safety of mediastinum and mobilization of the sternum.

Since 2011, element of the Ravich was added to our modification the dissection of the anterior plate of the sternum over its distortion from the partial horizontal incision in 20 patients. FC was corrected simultaneously with other anomalies in 42 patients, from which cardiac defects in 16, lung in 7, esophagus in 1, and diaphragm in 18.

**Main results:** Positive functional and cosmetic result was achieved in 97% of patients. With no deaths and severe life-threatening complications. We had hemothorax in 2, reactive pericarditis in 1, suppuration of the bar bed in 1, intraoperative pneumothorax in 22, horizontal displacement of the bar in 1, dislodging of bar in 3, relapse of the FC in 2 and hypercorrection in 2.

**Conclusion:** The placement our T-shaped bar with our modification allows safe installation without pneumothorax, or guiding instruments. Operation was significantly simplified for prevention of intense pain, displacement or dislodging of bar and relapse of FC after bar removal. The T-shaped bar is removed from single incision.

