

O5-5

**Atrial decompression in patients with HLHS and Hybrid approach by self expanding stents**

*Khalil M., Kerst G., Mienert T., Bauer A., Akintürk H., Schranz D.  
Pediatric Heart Center, Justus-Liebig-University Giessen, Giessen, Germany*

Background: A restrictive interatrial communication can be lifethreatening for patients with HLHS and hybrid approach. In some patients, recurrence of restricted interatrial communication can be observed despite initially successful balloon atrioseptostomy. We report our institutional experience performing atrial decompression by stenting the atrial septum.

Methods: From 2012-2015, atrial decompression was performed by stent implantation in 14 infants with HLHS and Hybrid procedure (Giessen procedure Stage I consists of bilateral pulmonary banding and PDA stenting). The median weight was 3.9 kg (2.7-5,38). Interatrial stenting was performed at an median age of 48days (5-116days). 7 Patients received balloon atrioseptostomy in prior interventions. In all patients self expanding stents (Sinus Superflex DS, Optimed) were implanted (5 x(8x12mm), 3x(7x15mm) 6x (8x15mm)). In 3 patients additional stent dilatation was performed with 8x20 or 7x20 sterling ballon.

Results: The mean trans-septal gradient was reduced from 15mmHg to 3mmHg. In one patient dislocation of the stent occurred, which has been recovered without complications. This patient received a successful interatrial stent implantation a few days later.

Conclusion: Atrial decompression in infants with HLHS by self expanding stents (SS-DS) is a safe and effective method.