O-009 Fenestrated Stent for Arch Repair for Acute Stanford Type A Aortic Dissection — A Conservative Solution for Complex Condition

**Abdominal Aortic Diseases**

**Yunxing Xue, Qing Zhou, Dongjin Wang**

The Affiliated Drum Tower Hospital of Nanjing University Medical School, Nanjing, China

**Introduction:** The best surgical strategy for acute Stanford type A aortic dissection (aTAAD) involving the arch is controversial. We have used a novel method that antegrade implanting a previously fenestrated stent for arch repair, which have revealed acceptable results.

**Methods:** From December 2014 to December 2016, 81 aTAAD patients (52 male, 29 female) underwent ascending aorta replacement and fenestrated stent graft implantation. The fenestrated stent graft was implanted into the true lumen of aortic arch during the hypothermia circulation arrest period. The proximal descending aorta with the lumen of aortic arch during the hypothermia circulation arrest period. The proximal end of the stent graft was anastomosed to the distal end of the Dacron tube graft that replaced the proximal ascending aorta. All patients had contrast enhanced computed tomography angiography before discharge and during follow up.

**Results:** The cardiopulmonary bypass time was 213 ± 49 minutes, aortic cross-clamp time was 133 ± 39 minutes, and selective cerebral perfusion and lower body arrest time was 27 ± 8 minutes. There were 5 in-hospital deaths due to circulation failure, multiple organ dysfunction and pulmonary infection (with the mortality of 6.2%). 5 patients died during follow-up period, the main causes of follow-up mortality were cerebral events and aortic rupture. The surviving patients had contrast enhanced CT scans in the 3rd, 6th, and 12th months. The morbidity of complication of endoleak from supraarch vessels was 5.6% (4/71), but all 4 patients were under follow-up without intervention because no dilation were discovered. The flow up CT revealed increasing false lumen thrombosis.

**Conclusion:** In patients with aTAADD, the previously fenestrated stent graft results in excellent aortic remodeling of the aortic arch and descending aorta without increasing morbidity and mortality. The risk of endoleak is maybe the underlying complication. But it will be a conservative solution for arch repair in aTAAD, especially concomitant with severe conditions.

**Disclosure:** Nothing to disclose

---

O-010 Open Conversions and SemiConversions after EVAR: A 22-year Multicentre Experience

**Abdominal Aortic Diseases**

**Paolo Perini** 1, **Mauro Gargiulo** 2, **Roberto Silingardi** 3, **Raffaello Bellosta** 4, **Stefano Michelagnoli** 5, **Stefano Bonvini** 6, **Gabriele Piffaretti** 7, **Nicola Tusini** 8, **Patrizio Capelli** 9, **Stefano Bonardelli** 10, **Antonio Freyrie** 1

On Behalf of the LOCONS-1 Study Group on Open Conversions and SemiConversions after EVAR

1 University of Parma, Vascular Surgery, Parma, Italy
2 University of Bologna, Vascular Surgery, Bologna, Italy
3 University of Modena and Reggio Emilia, Vascular Surgery, Modena, Italy
4 Poliambulanze Foundation Hospital, Vascular Surgery, Brescia, Italy
5 USL Toscana Centro, “San Giovanni di Dio” Hospital, Vascular and Endovascular Surgery, Department of Surgery, Florence, Italy
6 S. Chiara Hospital, Vascular Surgery, Trento, Italy
7 Circolo University Teaching Hospital, University of Insubria School of Medicine, Vascular Surgery, Department of Medicine and Surgery, Varese, Italy
8 AD Reggio Emilia, Arcispedale S. Maria Nuova, Vascular Surgery, Reggio Emilia, Italy
9 AUSL Piacenza, General and Vascular Surgery, Piacenza, Italy
10 University of Brescia, Vascular Surgery, Department of Clinical and Experimental Sciences, Brescia, Italy

**Introduction:** The majority of late endovascular abdominal aortic aneurysm repair (EVAR) complications are usually managed by endovascular means. Nevertheless, a late open conversion (LOC) or semi-conversion (SC) is sometimes required. The aim of this study is to report the technical aspects of a multicentre experience of LOC and SC, and to compare early and long-term outcomes of these two treatments.

**Methods:** All-LOC and SC performed from 1996 to 2018 in 12 vascular centres were reviewed. LOC was defined as a total or partial endograft explantation >30 days after the initial EVAR; whereas open or laparoscopic surgery for endoleak (EL) correction with complete endograft preservation was considered SC. Conversions performed for endograft infection or thrombosis were excluded. Patients’ demographics, time elapsing from EVAR, indication for conversion, operative technique (endograft removal, type of reconstruction or EL correction), 30-day and in-hospital mortality were analysed. Long-term survival was evaluated by Kaplan-Meier method.

**Results:** Two hundred and twenty-four patients were included: 195 underwent LOC, 29 SC. Mean age at conversion was 75.2±7.7 years; 88% male. Patients underwent LOC or SC after a median of 45.9 months (range: 1.2-193.5). Reasons for LOC were: 61% type I EL, 24.1% type II EL, 7.2% type III EL, 7.7% endotension. Indications for SC were: 69% type II EL, 31% type I EL.

Reconstructions in case of LOC were performed with dacron grafts in 189/195 cases, axillo-bifemoral bypass in 3/195, cryopreserved arterial allografts in 2/195, and autologous superficial femoral vein in 1/195. SC were performed as follows: 13/29 sacculotomy and lumbar/inferior mesenteric artery (IMA) ligation, 7/29 hypogastric and/or IMA ligation, 6/29 sacculotomy associated with neck banding, 3/29 neck banding.

Overall 30-day mortality was 8.5% (19/224), in-hospital mortality 12.1% (27/224). In-hospital mortality rates were significantly higher for patients undergoing LOC (27/195, 13.9%) compared to SC (0/29, P=0.03). The estimated 1-year survival rates were 83.8% for LOC, and 78.3% for SC. Long-term survival was significantly lower for SC (67.5% vs. 43.7% at 5 years, log-rank P=0.02)