



## *Basic Science Research*

# Preliminary Results of Aorfix™ Stent Graft to Treat Infrarenal Abdominal Aortic Aneurysms with Severe Proximal Aortic Neck Angulation

*Pietro Volpe,<sup>1</sup> Mafalda Massara,<sup>2</sup> Antonino Alberti,<sup>1</sup> Santo Marino,<sup>1</sup> Alberto Volpe,<sup>3</sup> Daniela Mazzaccaro,<sup>4</sup> Silvia Stegher,<sup>4</sup> and Giovanni Nano,<sup>4,5</sup> Reggio Calabria, Taranto, Rome, and Milan, Italy*

**Background:** We report a preliminary experience about endovascular aortic repair (EVAR) of infrarenal abdominal aortic aneurysm (iAAA) with severe proximal aortic neck angulation (NA) using the Aorfix™ stent graft.

**Methods:** Data of consecutive patients with iAAA with severe proximal NA submitted to endovascular repair between September 2012 and December 2014 in 2 Italian centers of Vascular and Endovascular Surgery were retrospectively reviewed, and outcomes were analyzed using the software JMP 5.1.2.

**Results:** A total of 26 patients were treated. Median proximal NA was 87.5° (range 68–108°), and 3 patients were treated outside the instruction for use of Aorfix because of a proximal NA > 90°. Eleven patients (42.3%) had severe iliac tortuosity. The primary success rate was 92.3%, as 2 patients required intraoperative correction of a type Ia endoleak. Within 30 days, a right limb occlusion was successfully resolved with endovascular recanalization. The median follow-up period was 14 months (range 1–48 months): 1 patient died for neoplasm and 1 patient presented a type II endoleak from lumbar arteries at 3 months, which is still under surveillance. No other complications were reported during the follow-up period.

**Conclusions:** Preliminary results with the Aorfix stent graft seemed to be promising in the aim of reducing endoleak and migration rates in presence of iAAA with severe proximal aortic NA.