Conformability of Medtronic Endurant II endovascular stent graft in combination with Jotec iliac branched devices treating aortoiliac aneurysms.

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Objective
Aortoiliac aneurysms treated endovascularly account for up to 40% of all treated abdominal aortic aneurysms. Preserving the hypogastric artery will prevent possible colic ischemia, buttock claudication, spinal cord ischemia, and erectile dysfunction. Many devices are evaluated for efficacy, feasibility and long-term outcomes. However, no literature is available evaluating the feasibility of the Endurant II endovascular stent graft in combination with Jotec iliac branched devices treating aortoiliac aneurysms.

Methods
This is a single center retrospective case series. Patients included where all diagnosed with an aortic aneurysm with coexisting iliac aneurysm(s). A consecutive series of 18 patients are included with follow-up imaging in 17 patients. All patients received an Endurant II endovascular stent graft (Medtronic) in combination with a Jotec iliac branched device in either one or both hypogastric arteries.

Results
In 18 patients, 23 iliac aneurysms were treated (18 men; mean age 69.6, range 53-82). There were no perioperative complications. Technical success (defined as aneurysm exclusion with patent hypogastric artery and no endoleak objectified after six weeks on CT-angiogram) was obtained in 88% (15/17 patients). Two patients had a type II endoleak, without any growth on follow-up, no additional intervention was required. Mean duration of operation was 183 minutes (106-266), no renal decline was objectified during hospital stay (4 days, range 2-8). One patient was re-hospitalized 10 days post procedure with superficial ischemia of the sigmoid without the need of any intervention and good recovery (5 days).

Conclusion
Excluding aortoiliac aneurysms combining Endurant II (Medtronic) with Jotec iliac branched devices is a feasible technique. However, further (prospective) research is required evaluating long-term follow-up in a larger study population.