AAA Sac Filling

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Disclosures

- No Disclosures

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Design and biocompatibility of endovascular aneurysm filling devices

Jennifer N. Rodriguez, M. Hong, John H. Hemingway, Todd L. Lamey, Anthony Bechtle, Shoshana Plasschak, Douglas Felker, Jesse Bryant, Mud Smal&qu...Kathleen, M. Kenneth

Current research suggests that polymer-based devices improve volumetric filling and subsequent stabilization of aneurysms, potentially leading to better patient outcomes and lower rates of stenosis and mortality.

BASIC RESEARCH STUDIES

Aortic Customize: A new alternative endovascular approach to aortic aneurysm repair using injectable biocompatible elastomer. An in vitro study

Willem Aurora, P. P., Bosman, MD.**, Jan J. van der Steenbreen, MPA.**
Sue Wilson-Erasmus, MD, PhD.**, Jeroen J. Kaper, MSc, PhD.**, Alexander C. de Voico, MD, PhD.**

(J Vasc Surg 2010;51:1230-7.)

Aortic Customize: An In Vivo Feasibility Study of a Percutaneous Technique for the Repair of Aortic Aneurysms Using Injectable Elastomer

W. M. S. F. Bosman, M. S., J. Vlot, M. F. A., J. J. van der Steenbreen, M. S., O. van den Berg, M. F. Hamming, M. A. C. de Voico, M. A. F. Brom, M. J. Jacobs
8 female Swifter sheep
77-92 kg
7 days acclimatization
Approval Ethical Committee Animal Research
20 weeks survival
Survival outcomes

- Patent lumen in the polymer cast
- No aneurysm rupture
- No migration
- No pathological signs in carotid arteries
- No polymer particles, emboli or infarction in the brain

Next steps

- Medical Ethical Committee approval (Dec 2017)
- Translumbar type II treatment (Jan 2018)
- Transfemoral prophylactic treatment (March 2018)
- Report at Veith 2018