Video Technique for Human Robot-Assisted Microsurgical Vasovasostomy

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Abstract

Previous studies have shown that robot-assisted microsurgical vasovasostomy (RAVV) has technical advantages over pure microscopic vasovasostomy (MVV) in animal and human models. This study presents a technique video and initial results for RAVV in 20 human cases compared with 7 MVV cases by a single fellowship-trained microsurgeon from July 2007 to June 2009. A three-layer 10-0 and 9-0 suture anastomosis was performed with up to 22 months of follow-up (mean, 3 months). Mean operative duration for the RAVV cases was 109 and for the MVV was 128 min ($p = 0.09$). At 2 months post-op, all patients were patent. Mean sperm count was 54 million in RAVV and 11 million in MVV ($p = 0.04$). The use of robotic assistance in microsurgical vasovasostomy may have potential benefit over MVV in decreasing operative duration and significantly improving early semen analysis measures. Further evaluation and longer follow-up is needed to assess its clinical potential.

The authors have nothing to disclose.

Runtime of video: 9 min 39 sec

Cite this video

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