Single-Center Retrospective Study of the Technique, Safety, and 12-Month Efficacy of the MiniArc™ Single-Incision Sling: A New Minimally Invasive Procedure for Treatment of Female SUI

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ABSTRACT

This study was conducted to report on the technique, safety, and early efficacy of a single-incision mini-sling to treat female stress urinary incontinence (SUI). Women suffering from SUI were offered a single-incision approach to place a suburethral polypropylene mesh tape in a position similar to that of a transobturator sling without passage of needles through the groin. Retrospective data was collected on 61 patients that received the new MiniArc™ single-incision sling at a single center in the United States. Patient selection and concomitant procedures were determined by the senior authors at the center, and the senior authors were the primary surgeons in all cases. Procedures were completed under general, regional, or MAC anesthesia as determined by the surgeon. Average operative time for the sling procedure alone was short and the average blood loss was 29 cc. There were no intraoperative complications. There was one postoperative adverse event secondary to urinary retention that was resolved by loosening of the sling under local anesthesia in an office setting. The overall cure rate at 12 months determined by physician and patient assessment in 58/61 patients was 91.4%. No patients suffered pain or dyspareunia secondary to the sling, and no erosions or extrusions were reported. In this initial study, the MiniArc™ single-incision sling appears to be a safe approach to treat female SUI, and the early clinical results are encouraging.