

EXPERIENCE ON SALVAGE PENILE CURVATURE CORRECTION SURGERY

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Abstract

Objectives: It is commonly believed that coarser suture materials should be used to provide sufficient tenacity in tunical surgery for penile curvature correction. We report our 15-year experience of fine sutures in a second operation in 33 patients who underwent prior curvature correction elsewhere with coarser sutures, resulting in resumption of penile curvature associated with erectile dysfunction.

Materials and Methods: From February 1993 to November 2009, unsatisfactory postoperative outcomes prompted 45 patients, aged 19 to 37 (mean age = 29), to consult our institutes after previous tunical surgery at other institutions. These patients were remarkable for normal erectile function prior to the first tunical surgery in which 2/3-0 nylon sutures were used. They frequently presented with recurrence of penile curvature resulting from herniation/weakening of a tunical region or even crateriform tunical defects associated with gradual loss of erectile capability and palpable lumps. In this series, 33 patients underwent a revised Nesbit procedure at the level of the collagen bundles using finer sutures which is optimal for approximation of collagen bundle. Prior to July 1998, 10 men underwent salvage surgery using 4-0 polyglactin sutures. Thereafter, we have adapted 6-0 nylon sutures for another 23 patients. These were categorized into the polyglactin and nylon groups respectively. Overall, 31 patients were available for a follow-up while using the abridged five-item version of the International Index of Erectile Function (IIEF-5) scoring system with 22 patients in the nylon group.

Results: The follow period ranged 0.6 to 16.0 years with an average of 6.9 ± 2.5 years. The penile morphology both subjectively and objectively was excellent in all patients, except for one in each group. Erectile function restoration showed a trend of satisfaction in the polyglactin group and based on IIEF-5 was significantly improved in the nylon group (14.2 ± 3.5 vs. 21.8 ± 2.2 , $n=22$, $p<0.001$). We have found that cavernosography is a practical and reliable method to objectively assess penile morphology and probably erectile function in these patients.

Conclusion: We may suggest that in penile tunical surgery, fine sutures such as 6-0 nylon may be an ideal suture material for resulting better penile morphology and functional outcomes since it has been sustainable in salvaging tunical surgery.