Moore R D ¹, Miklos J R ¹, Kohli N²
1. Atlanta Urogynecology, 2. Harvard University

POSTERIOR REPAIR WITH DERMAL GRAFT: COMPARISON OF PORCINE AND HUMAN GRAFTS

Hypothesis / aims of study

To report our experience using porcine and human dermal grafts in 195 patients to augment site specific fascial defect repair of rectoceles and to compare results and complications between the two groups of patients.

Study design, materials and methods

Retrospective chart review was completed of 100 consecutive patients who underwent site-specific fascial defect rectocele repair augmenting the rectovaginal septum with a 4X7 cm porcine dermal graft (Pelvicol, Bard Urology) and 95 patients that received a human allogenic dermal grafts. Additional vaginal/laparoscopic repairs were made as necessary. POP-Q evaluation of the pelvic floor was made preoperatively and postoperatively at 1, 3, 6 and 12 month intervals. Subjective assessment of sexual function and bowel function was made utilizing standard questionnaires. Additional subjective follow-up was obtained via phone interviews and/or questionnaire sheets that are sent to patients that do not come in for objective follow-up exams. Intraoperative and postoperative complications were recorded.

Results

There were no significant differences in demographics between the two groups. Average patient age was 61.1 ± 11.7 , average parity was 2.7 ± 1.4 , average BMI was 26.0 ± 4.7 . 81% of patients were post-menopausal and 55% were taking estrogen replacement. Mean follow-up in the porcine and human groups was 14.2 and 20.9 months respectively. Preoperative Ap and Bp values were not statistically different between the two groups (p value= 0.6, human t-test). Using a point Ap or Bp measurement of -0.5 or > to define surgical failure post-operatively, 99/100 (99%) of the porcine group were noted to have surgical cure at objective follow-up versus 86/95 (90.4%) in the human graft group. These cure rates were not found to be statistically different (p=0.19 log rank test). Postoperative subjective evaluation revealed statistically significant improvement in pre- and post-operative constipation in both groups (59% pre-op and 20.1% post-op) p-value<0.0001, but no difference between the two groups (p value=1.0, Fisher 2-sided). There was no statistical difference in pre- and postoperative dyspareunia between the two groups. There were no major complications with either group and no difference in adverse events such as incision separation, vaginal infection, and vaginal scarring.

Concluding message

Site-specific rectocele repair augmented with either porcine or human allogenic dermal graft is a safe procedure and is associated with comparable high cure rates as well as significant improvement in quality of life issues such as constipation. Both grafts seem to be very well tolerated by patients with comparable low complication rates

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