Defect specific posterior repair vs posterior colporrhaphy (PC): Medium-term outcomes

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ABSTRACT

Introduction: We aimed to compare the objective and subjective outcomes of defect-specific posterior repair (DSPR) versus posterior colporrhaphy (PR). **Methods:** This was an ancillary analysis of an ethics-approved cross-sectional study involving 120 women who had surgery for FPOP between 2007-2023. All women underwent a clinical assessment including a non-validated clinical interview, ICS-POPQ assessment followed by a 4-dimensional translabial pelvic floor ultrasound (US). The primary outcome measure was sonographically diagnosed recurrent rectocele. Secondary outcome measures were subjective and clinically diagnosed objective recurrence. Offline assessment of archived ultrasound volumes for primary outcome measures was performed using a proprietary software, blinded against all clinical data. **Results:** Mean post-operative interval was 53.8 (SD 42.5, range 3.1-173.5) months. 19.6% (n=19) underwent DSPR. Subjective and clinical recurrence rate was 22.7% and 13.4%, respectively. 14.4% (n=14) had recurrent rectocele on US at a mean depth of 14.3 (SD 3.8) mm. No difference in the rate of subjective and clinical recurrence between the two groups (p=0.12-0.85). Rectal ampulla position was higher i.e., 9.4 mm above the SP in DSPR group versus 0.03 mm below in PC group (p=0.02). None in the DSPR group had recurrent rectocele diagnosed sonographically, compared to 17.9% in PC group (p=0.046). Levator avulsion seemed to be the predictor for sonographic rectocoele recurrence (p=0.01) on binary logistic regression test. **Conclusions:** No difference in the subjective and clinical recurrence rate following DSPR versus PC. DSPR seemed to be associated with a lower rate of sonographically diagnosed recurrent rectocele compared to PC. Levator avulsion is a strong predictor of recurrence.

Effects of co-treatment of GnRH-analog alone or in combination with aromatase inhibitor or progestin on endometrial αvβ3 integrin expressions in women with recurrent miscarriage

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ABSTRACT

Introduction: Recurrent miscarriage (RM) has been linked to endometrium receptivity. We aimed to assess the expression of αvβ3 integrin in endometrium tissue during the window of implantation (WOI) following administration of GnRH analog alone or in combination with either aromatase inhibitor (AI) or progestin (PrG). **Methods:** A randomized control trial (RCT) was conducted in Hospital Canselor Tuanku Muhriz (HCTM). Women with RM were divided into three Group I–GnRHa, Group II–GnRHa + AI, and Group III–GnRa + PrG. The endometrial tissue biopsy was taken during the luteal phase (pre-treatment) and post-treatment, to evaluate the αvβ3 integrin expression. The intensity and distribution in endometrial glands were assessed using HSCORE system. **Results:** 39 women with RM were included with 13 in each group. The mean age was older in Group I; 38.00 ± 4.9 years old with a mean BMI of 25.7 ± 2.44 kg/m^2. Group II had the greatest intensity and distribution of αvβ3 integrin expression > 50 following the treatment; from 28.6% to 42.9% ($p<0.05$), and a significant increase in HSCORE following the treatment from 1.82 ± 0.70 to 2.36 ± 0.56 ($p < 0.05$). Both HSCORE of Group I and Group III demonstrated an increase, although the results were statistically non-significant (Group I: 1.90 ± 0.91 to 2.29 ± 0.77, and Group III: 1.67 ± 0.77 to 1.90 ± 0.87). **Conclusion:** The αvβ3 integrin expression can be significantly elevated with GnRHa and AI as pre-treatment, thus aiming for better implantation results among women with RM.