

Secondary vaginal stenosis following traumatic vaginal delivery: A case report

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ABSTRACT

Introduction: Acquired vaginal stenosis is relatively rare but may occur following birth injury. Here we report a case of secondary vaginal stenosis in a patient presented one year after a traumatic vaginal delivery. **Case Description:** A 31-year-old, Malay lady, para 2 presented with complaint of one-week history of abdominal pain. She experienced similar symptoms for the past 6-7 months cyclically which resolved spontaneously but not this time. She has had a traumatic ventouse-assisted delivery one year ago and has been abstinent from sexual intercourse and has been amenorrhoeic since then. Examination revealed hematometra, hematocolpos and complete vaginal stenosis. Examination under anaesthesia, adhesiolysis and evacuation of hematometra and hematocolpos was performed. A cruciate incision was made through the fibrous band followed by dissection till a tunnel created towards the cervix. About 500 cc of altered blood was drained out. The cavity was dilated with Hegar's dilator. Vaginal packing with a roller-gauze soaked with flavine emulsion was inserted post procedure and broad-spectrum oral antibiotics was prescribed. Patient was advised to use vaginal dilator 2-3 times per day with biweekly 0.625 mg Premarin cream upon discharge. Unfortunately, she defaulted follow-up and re-presented after 3 months with recurrent hematometra and hematocolpos. Second EUA and vagina reconstruction was done. **Discussion:** The treatment of vaginal stenosis is creation of a functional vagina. Though surgical procedures are the mainstay treatment, postoperative vaginal dilation is crucial to prevent recurrence. Without frequent vaginal dilation post-operation, the reconstructed vaginal canal will collapse and stenosis will recur.

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The outcomes of novel ETRF therapy on the expression of endometriosis-related pro-inflammatory markers

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ABSTRACT

Introduction: The pelvic inflammation in endometriosis affects the purpose of endometrial stromal fibroblast (eSF) cells resulting in chronic pelvic pain and subfertility. Tocotrienol-rich fraction (TRF) has powerful anti-inflammatory and antioxidant activities. An enhanced TRF (ETRF) is hypothesized to provide comparable effect in endometriotic tissues. We aim to evaluate the anti-inflammatory effects of novel ETRF on the endometrial stromal fibroblast (eSF) cells of endometriotic tissues. **Methods:** Endometrial pipelle sampling was carried out to obtain human primary eSF cells from patients with normal endometrium (NEC) as a control and endometrium of patients with endometriosis (PEC). PEC patients were samples obtained from a histology-confirmed endometriosis patient. NEC patients have normal menstrual cycles and not on any hormonal treatment within the last 6 months. The eSF cells were cultured in mixture of Dulbecco's modified Eagle's medium (DMEM)/F12, 10% fetal bovine serum (FBS), 1% antibiotic-antimycotic, and 1% L-glutamine and passed into culture up to passage ten. Both NECs and PECs were cultivated and incubated with 25 g/ml of ETRF for 24 hours, and the differential expression of pro-inflammatory genes was evaluated using real-time polymerase chain reaction (qRT-PCR). **Results:** COX-2 and IL-6 were significantly suppressed in ETRF-treated NECs (p-value 0.01, p-value 0.05, respectively), although MIF and IL-8 were not significantly altered. In ETRF-treated PECs, COX-2 (p-value 0.004), MIF (p-value 0.002), and IL-8 (p-value 0.003) genes were significantly downregulated, however IL-6 was not affected significantly. **Conclusion:** ETRF at a dose of 25 g/ml dramatically downregulates the expression of pro-inflammatory genes COX-2, MIF, and IL-8 in PECs.