



Deep Infiltrating Endometriosis with Vaginal Pain

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INTRODUCTION

Deep Infiltrating Endometriosis (DIE) is defined as any manifestation of endometriosis that extends beyond the superficial tissue of implantation, usually beyond 5mm in depth^{1,2}. The prevalence of endometriosis in women of childbearing age is thought to be between 5-15% with up to 20% of these women suffering from DIE². In this case we present a rare instance of DIE presenting with specific right sided vaginal wall pain.

CASE REPORT

A 39 year old G4P4 presented with significant right sided vaginal wall pain for three years, independent of intercourse. Her past history is relevant for three caesarean sections, opting for a VBAC in her second pregnancy, resulting in a forceps extraction, episiotomy and right sided vaginal laceration. She has a known history of endometriosis, her most recent laparoscope in 2016 being reported as disease free. Examination revealed significant pain on bimanual palpation, demonstrating an exquisitely tender right vaginal wall nodule, alongside significant tenderness over the posterior fornix and perineum. The patient underwent a laparoscopic excision of endometriosis and modified Fenton's procedure, during which an infiltrating nodule was found in the pouch of douglas and right pararectal space which was seen to extend into the vaginal wall. This nodule was excised and sent for histology, confirming pararectal and pouch of douglas DIE, with non-specific findings isolated from the right sided vaginal wall. The patient recovered well post-operatively and has been pain free for one year since.

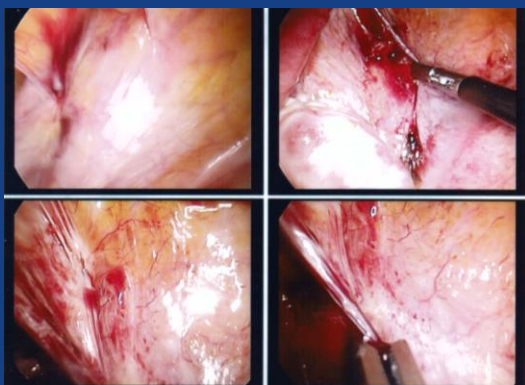


Figure 1: Endometriosis identified in the pouch of douglas, right uterosacral ligament and right pararectal space.

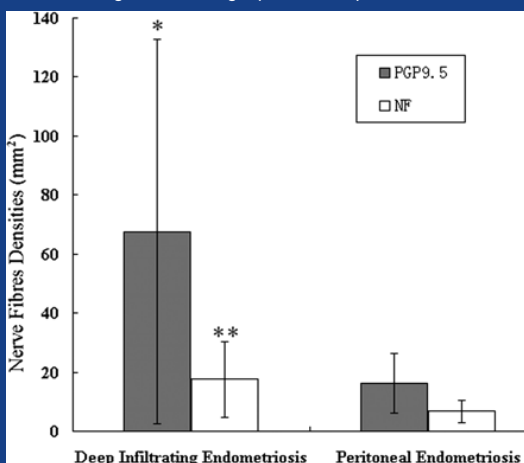


Figure 2: Densities of nerve fibres (Mean +/- SD) in DIE and superficial endometriosis stained with PGP9.5 and NF⁴.

DISCUSSION

DIE is carries with it significant morbidity, thought to be largely related to positioning and density of nerve fibres within the tissue. Women with endometriosis express peritoneal markers for neural outgrowth and regeneration which are not seen in disease free women, suggesting that endometriosis related pain may be associated with the neuro-angiogenesis seen within the tissue³. The density of peritoneal nerve fibres in women with DIE is over 30 times more than that seen in disease free women⁴.

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