

SURGICAL MANAGEMENT OF DEEP INFILTRATING BLADDER ENDOMETRIOSIS – A VIDEO CASE STUDY

Introduction

This surgical video presents a case of deep infiltrating bladder endometriosis and the surgical steps undertaken laparoscopically to remove the diseased area. Ms P, a 26 year old nullipara was referred to the local tertiary Urogynaecology service with a twelve month history of recurrent cystitis. The onset of symptoms co-incident with cessation of the oral contraceptive and just prior to commencing the menstruation cycle every month. Ms P was actively trying to conceive and had a recent history of one miscarriage. She was anxious that urinary tract infection might have caused her pregnancy loss. Previous urinary analysis revealed no evidence of recurrent active bacterial infection. An outpatient cystoscopy was arranged. The cystoscopy showed a 3cm x 3cm raised infiltrating lesion located proximal to the trigone. The lesion was suspicious for endometriosis. Biopsy was not taken due to the friable appearance of the lesion and bleeding risk, instead multiple images were obtained and the case was discussed at Multidisciplinary meeting. A decision was made to remove the suspected endometriosis nodule from the bladder surgically. Ms P underwent laparoscopic surgical excision of a deeply infiltrated bladder nodule with a partial cystectomy. Both ureters were catheterized prior to commencing the procedure. The endometriotic nodule in the vesico-uterine fold was approached laparoscopically as demonstrated in the video submitted with this abstract. Endometriosis is defined as the presence of endometrial glands and stroma at extrauterine sites is a common benign gynaecological disease with 20-35% of the women of reproductive age affected. However less common is for women to have lesions affecting the urinary system and fewer than 1% of women with endometriosis will have urinary system involvement, with only few cases of deep infiltrating bladder endometriosis described in the literature.¹ Presentation of bladder endometriosis is varied and can make initial diagnosis challenging. Cyclical haematuria is a late sign and cases present with non-specific dysuria and cystitis or with features consistent of endometriosis such as pelvic pain and infertility. Cystoscopic examination is gold standard for investigation and diagnosis. Treatment options are either medical or surgical, however given the rarity of bladder endometriosis, optimal management guidelines and outcomes for bladder endometriosis are not well established. Surgical excision with partial cystectomy remains the main stay of treatment with invasive disease with good results. One case series followed 75 women following partial cystectomy with confirmed endometriosis for 60 months and improvement in symptoms was reported by all patients². This video case study highlights a presentation and subsequent management of infiltrating bladder endometriosis.

Design

Informed consent was obtained from the case study, a 26 year nulliparous women with deep infiltrating bladder endometriosis on cystoscopy. This video was filmed with laparoscopic tower video equipment and edited by the authors.

Results

This video presents a case of invasive uterovesical endometriosis diagnosed after cystoscopy following initial presentation of recurrent cystitis. A 3cm endometriotic nodule was excised from the vesicovaginal and vesicouterine pouch. Laparoscopic partial cystectomy was undertaken and the bladder was repaired in three layers. The nodule was confirmed as endometriosis after histopathology. At follow up four weeks postoperatively, patient experienced complete resolution of symptoms with no voiding difficulty or lower urinary tract symptoms. Ms P went on to have a spontaneous conception shortly after the definitive surgery and has now delivered a liveborn baby with no intra nor postpartum complications. She remains free of any urinary symptoms at 20 months post operatively.

Conclusion

This video documents the presentation and subsequent surgical management of an infiltrating endometriosis of the bladder. This case confirms that although it can be a rare diagnosis, but deeply infiltrated bladder endometriosis does occur and can be managed effectively by an experienced laparoscopist

References

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2. Chapron C, Bourret A, Chopin N, et al. Surgery for bladder endometriosis: long-term results and concomitant management of associated posterior deep lesions. Hum Reprod 2010; 25:884

Disclosures

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