Case Report

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Umbilical bleeding during menstruation in status post laparoscopic cholecystectomy of unknown/ambiguous aetiology

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ABSTRACT

Although umbilical endometriosis is a possible cause of cutaneous manifestation of retrograde menstruation during cyclical bleeding in status post laparoscopic surgery patient, Here in this case we presumed a diagnosis of endometriosis on the basis of its symptoms which couldn't be proven in biopsy and on immune-histo-chemistry and casted a query that now what is the next possible aetiology which is responsible for umbilical bleeding specifically during menstruation in the patient with status post laparoscopic surgery. We report a case of presumed secondary umbilical port scar endometriosis in a 25-year-old lady nulliparous woman following laparoscopy-assisted cholecystectomy 6 months ago. Remarkably patient complained of peri umbilical pain and menstrual bleeding through umbilicus (retrograde) soon after surgery which was remarkably noticed only during her periodical cycle. History and clinical examination, haematology, ultrasound, computed tomography and MRI of abdomen and pelvis performed to rule out any primary lesions which all were found unremarkable. After counselling the patient about the presumptive causes and treatment options the umbilicus with its surgical scar mark excised and the tissue was sent for histopathological examination which was found inconclusive with no evidence of endometriosis at all. Remarkably it was further scrutinized by immune-histo-chemistry but remained fruitless. Fortunately, patient relieved her symptoms of retrograde menstrual bleeding after total excision of the umbilicus with scar mark post operatively but still left a diagnostic stigma for surgeons.

Keywords: Cyclical umbilical port scar bleeding, Presumptive extra pelvic endometriosis, Post laparoscopic cholecystectomy, Unknown aetiology

INTRODUCTION

Umbilicus represents a unique site where reports are shown of spontaneous endometriotic as well as iatrogenic scar related implants.¹

Umbilical bleeding during menstruation is usually attributed by endometriosis either primary (spontaneous) or secondary (after surgery in surgical scar). It has been reported since 1953 even or earlier in journals as a case report.^{2,3}

Endometriosis is characterized by the presence of endometrial glands and stroma outside the uterus. It classically affects 10-15% of woman of reproductive age and 6% of peri menopausal woman. It mostly occurs in pelvis vulva, vagina, cervix, ovary, and pouch of Douglas, Cul de sac, bladder and uterosacral ligaments.⁴

Extra pelvic endometriosis is very rare, occurs either in diaphragm, pulmonary, urinary tract, GI tract, brain, cutaneous or umbilicus where umbilicus accounts 0.5-1% of all extra pelvic sites.^{5,6}

Differential diagnosis is granuloma, primary or metastatic adenocarcinoma (Sister Joseph nodule), umbilical hemangioma urachus anomaly, sarcoma, adeno carcinoma, nodular melanoma and cutaneous endosalpingosis, primary cancer of umbilicus (basal cell and squamous cell carcinoma), melanoma and Paget's disease.⁷

Other causes are pilonidal sinus of umbilicus, (the broken hair enters the skin to the deepest part of the umbilicus and cause foreign body reaction and subsequent development of discharging sinus) in a recent study, umbilical pain (100%) was found to be the most common presenting symptom followed by bloody discharge (69%), purulent discharge (23%), and umbilicus mass (26%).

Umbilical dermatoscopic features represents as a nodule which bleeds spontaneously. 10

Surgical choices vary from total umbilical resection with or without repair of underneath fascia and peritoneum to local excision of scar with preservation of umbilicus. Total umbilical resection with neo umbilical formation is ideal treatment to prevent recurrence and avoid aesthetic issues respectively. ^{11,12}

We report a case of umbilical scar bleeding in patient with status post laparoscopic cholecystectomy which was remarkably occurring during menstruation and used to stop with menstruation as well. Presumptive diagnosis of endometriosis made on the basis of symptoms which was found untrue or inconclusive on biopsy and on immune-histo-chemistry. Remarkably consequent upon surgery no further retrograde scar or umbilical bleed seen.

CASE REPORT

We report a case of secondary umbilical laparoscopic port scar bleed in a 25-year-old lady nulliparous woman following laparoscopy-assisted cholecystectomy 6 months ago. Remarkably patient complained of peri umbilical pain and menstrual bleeding through umbilicus soon after surgery which was remarkably noticed only during her periodical cycle.

On examination she had soft non tender abdomen with healed scar mark around the umbilicus with no signs of inflammation (Figure 1 and 2). Her laboratory investigations found within normal limits.

Ultrasound, computed tomography and MRI of abdomen and pelvis performed to rule out any primary lesions which were found unremarkable as well.

A presumptive diagnosis of secondary umbilical scar endometriosis was made on the basis of high level of suspicion and on presenting sign and symptoms Figure 3 and 4. Patient was counselled about extent of treatment, removal of umbilicus and possible post-operative recurrence.

Definitive surgery was performed and umbilicus with its scar mark and surrounding tissue was excised, wound closed in layers (Figure 5). Post-operatively tissue was sent for histopathological examination which was found inconclusive in Figure 6 (A and B), with no evidence of scar endometriosis. On the other hand, post operatively, patient was found got rid of any further retrograde menstrual bleeding during her cycle.

This case presents differently due to the fact that the patient had retrograde menstruation through umbilicus during cycle which she never experienced before laparoscopic surgery and another reason was the ambiguous aetiology of umbilical bleeding during menstruation which couldn't be delineated by any means.



Figure 1: Umbilical/scar mark post-laparoscopic cholecystectomy.



Figure 2: Umbilical /scar mark post-laparoscopic cholecystectomy.

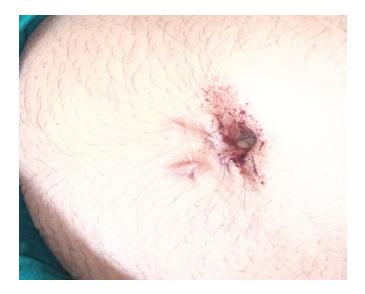


Figure 3: Umbilical scar bleed during menstruation.



Figure 4: Umbilical scar bleed during menstruation.



Figure 5: Post total umbilicus and port scar lesion excision.

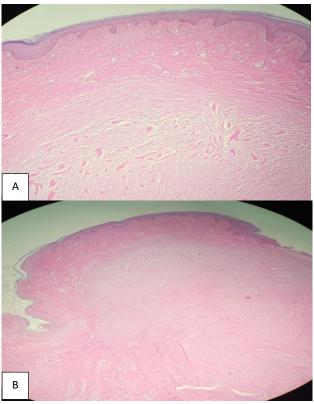


Figure 6 (A and B): Histopathology of the excised specimen with no endometrial stroma or gland and histopathology of the excised specimen with no endometrial stroma or gland.

DISCUSSION

Umbilical bleed during menstruation is usually caused by endometriosis although extra pelvic endometriosis is an uncommon entity.

Endometriosis can occur in patients who have no history of prior endometriosis as was seen in this patient.⁴

Endometriosis should always be a differential diagnosis when dealing with females of a reproductive age. The peak age of endometriosis occurs in women 25-35 years of age. Similarly, our patient was only 25 years old and was nulliparous as well.^{5,13}

The definite diagnosis of endometriosis is made on FNAC, enzyme immuno histo chemistry and CD 10. We in our study performed above to delineate pathology except getting CD 10. ¹⁴⁻¹⁶

The preferred treatment for umbilical endometriosis is total surgical excision as we have done in our case with uneventful post operative recovery and with no further retrograde menstrual bleeding in follow up.⁴

In common to other study done in 2011 our patient also had no any prior history of endometriosis. Umbilical endometriosis at the site of laparoscopic trocar entry is

one of the common sites. In our case, possibly the previous laparoscopic port site was also the site for umbilical bleed or endometriosis as well.⁵

Contrary to the study where umbilical endometriosis with cutaneous manifestation of nodule with no prior pelvic pathology; our study reveals secondary umbilical endometriosis with no any nodule and pelvic pathology as well but it was rather through previous laparoscopic scar mark around the umbilicus.^{1,17}

CONCLUSION

The presumptive diagnosis of endometriosis which couldn't be proven casted a query that now what could be the next possible aetiology which is responsible for umbilical bleeding specifically during menstruation in the patient with status post laparoscopic surgery. Umbilical scar bleeding either due to endometriosis or some other cause must be diagnosed pre or post-operatively. Although total excision of the lesion is curative and made patient symptom free but itself imposes an aesthetic dilemma as this approach is only possible at the cost of sacrifice of umbilicus. Regarding aesthetic issue for no umbilicus post operatively can be prevented by good counselling. Neo umbilicus can prevent this issue but needs plastic surgery expertise.

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