

## Spontaneous Umbilical Endometriosis: A Case Report

Sailuja Maharjan, Bandana Satyal, Reena Baidya

### ABSTRACT

Endometriosis is a common gynecological entity that usually occurs in the pelvic organs. Umbilical endometriosis is a rare condition that accounts for 0.5-1% of all extra genital endometriosis. It usually arises secondary to prior surgery but may arise *de novo* as well. We report a case of this condition with spontaneous occurrence, which was diagnosed preoperatively as umbilical granuloma. Umbilical endometriosis should be kept in differential diagnoses in women with umbilical lesions.

**Keywords** Cutaneous, endometriosis, umbilical, Nepal

### INTRODUCTION

Endometriosis is the presence of endometrial tissue at site outside of the uterus. It principally occurs in women of reproductive age group in the third and fourth decades.<sup>1</sup> The most common sites are ovaries, uterine ligaments, and rectovaginal septum.<sup>2</sup> Extra genital endometriosis is relatively uncommon and has been reported in almost every area in females.<sup>3,4</sup> Herein, we report a case of umbilical endometriosis, which is a rare entity.

### CASE REPORT

A twenty-four-year-old female presented to our surgical OPD with complaints of a nodule, measuring 1.8 × 1 × 0.8 cm, in the umbilicus for one and half months. The nodule was firm, painful, and cyclical in nature, synchronized with menstruation. Her menarche occurred at 12 years of age and her menstrual history is regular. She has a history of severe dysmenorrhea. She had a history of normal spontaneous vaginal delivery two years ago. She denies any history of trauma and any surgical intervention. Preoperative diagnosis was given as umbilical granuloma.

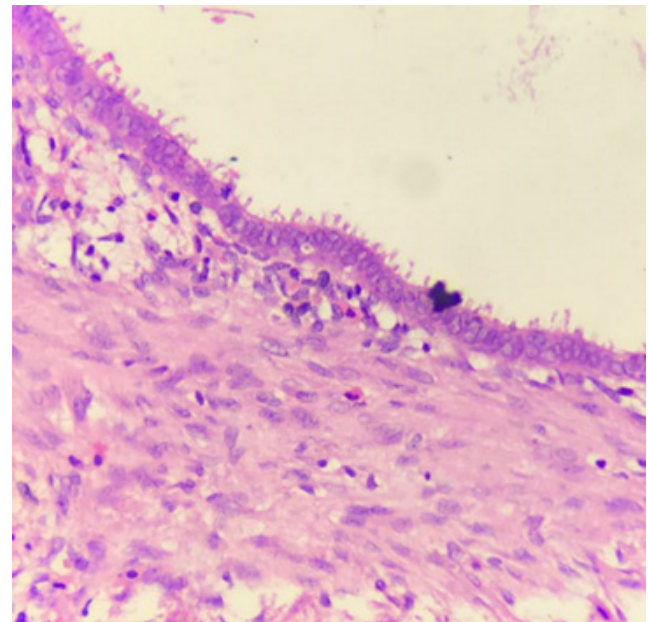
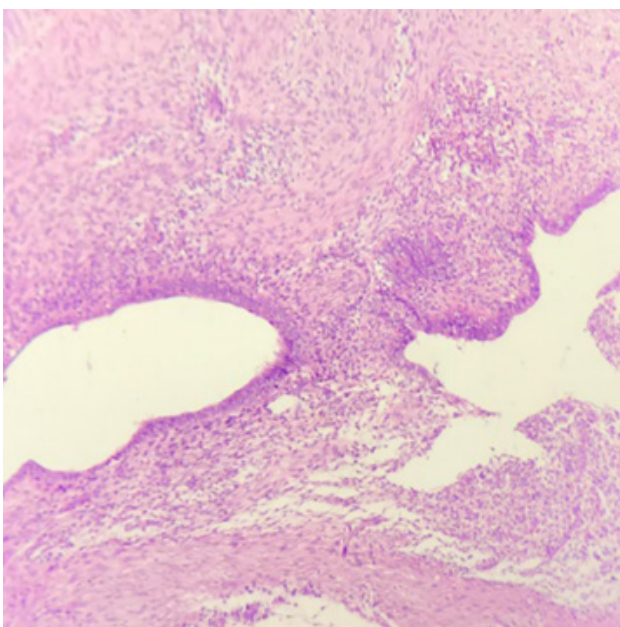


Figure 1. Endometrial glands surrounded by scant stroma, consistent with diagnosis of endometriosis (left panel) and endometrial glands with ciliated lining (right panel)

The lesion was locally excised and sent for histopathological examination, which demonstrated a lesion in the dermis, consisting of tubular glands lined by a single layer of columnar epithelium, a few of which had cilia (Figure 1). These glands were embedded in endometrial stroma. There were a few hemosiderin-laden macrophages. There were no features of atypia or malignancy. Thus, it was diagnosed as cutaneous endometriosis.

### DISCUSSION

Primary umbilical endometriosis develops spontaneously in the absence of any prior abdominal surgery and is also known as Villar's nodule, first described by Dr. Villar in 1886.<sup>5</sup> Secondary endometriosis, also known as scar endometriosis, occurs at the site of previous surgery.<sup>6</sup> Some theories postulate umbilicus as a site of physiological scar, explaining the spontaneous occurrence of the disease.<sup>1</sup> The



exact pathogenesis of this entity, however, is controversial; there are multiple theories proposed. The most commonly accepted explanations are implantation of endometrial tissue through retrograde menstruation (implantation theory), hematological or lymphatic dissemination of endometrial cells (dissemination theory), differentiation of pluripotent peritoneal progenitor cells into endometrial tissue (coelomic metaplasia theory).<sup>3,7-9</sup> The patients of endometriosis frequently present with complaint of swelling, discharge, bleeding, and cyclical pain during menstruation.<sup>2</sup> The temporal association of these symptoms in relation to the menstrual period is of utmost importance for the clinical diagnosis of the disease.<sup>9,10</sup> There may be associated features of pelvic endometriosis or history of past surgical intervention.<sup>8</sup>

Differential diagnoses that enter are umbilical hernia, pyogenic granuloma, keloid, melanoma, primary or metastatic carcinoma (Sister Mary Joseph's nodule).<sup>9,10</sup> Radiological investigations have been done in many studies, but they are not conclusive for diagnosis. A distinctive dermatoscopic finding, consisting of small red globular structures, known as "red atolls", has been observed.<sup>3,5</sup> Histopathology remains the hallmark for the diagnosis, which reveals the endometrial glands, stroma, and hemosiderin pigments. Some uncommon features like ciliated glands may also be present, as in our case. Local surgical excision remains the mainstay of the treatment, accompanied by gynecological workup to rule out concomitant presence of pelvis endometriosis.<sup>4,8,9</sup>

## CONCLUSION

Endometriosis is a common gynecological disorder, but umbilical endometriosis is uncommon. When confronted with the history of umbilical nodules associated with cyclical pain in women of reproductive age group, the possibility of endometriosis should be considered. Surgical intervention is the standard modality of treatment.

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