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Intraumbilical Mass with Cyclical Drainage

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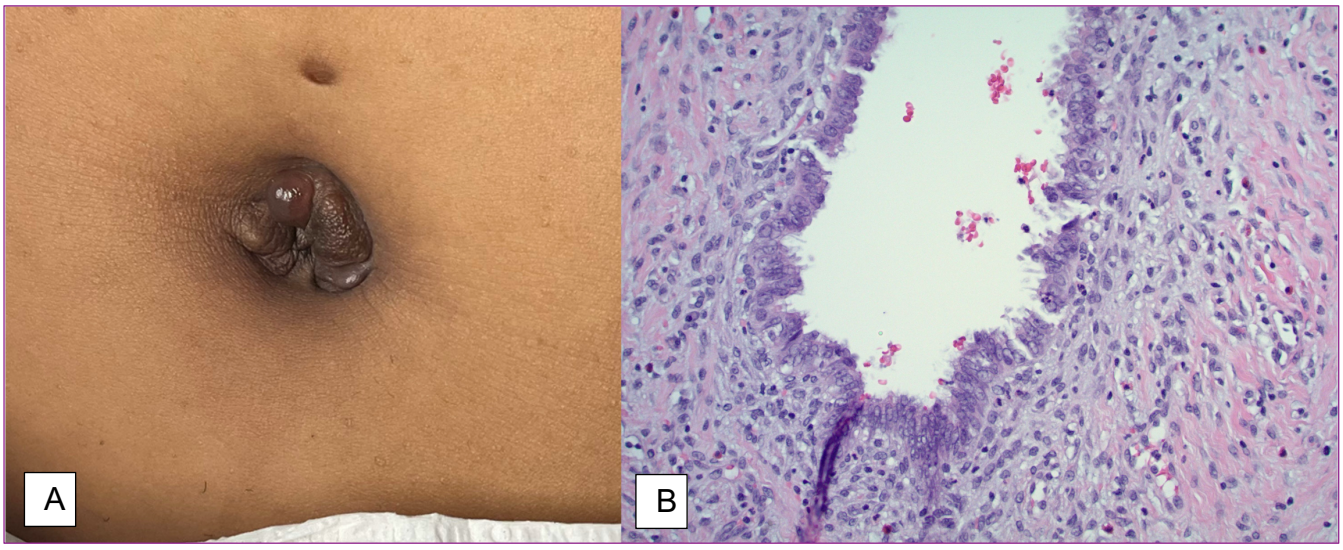

A healthy 34-year-old female presented to the clinic for a “cyst” in her belly button. The lesion first appeared over 1 year ago and since then, became symptomatic, warranting visits to urgent care and emergency departments. The patient reported the lesion would cyclically drain brownish fluid and she would experience associated swelling with pain across her abdomen. The patient was informed she had a sebaceous cyst at an urgent care and was sent home with oral antibiotics, with no improvement in her symptoms. Additionally, the patient had the cyst drained twice at the emergency department, however the lesion would recur shortly after each procedure. On exam, a smooth, skin-colored nodule measuring 1.1x1.7 cm was present within her umbilicus. (**Figure 1A**) The lesion was not actively draining and was non-tender to palpation.

Umbilical endometriosis was suspected, due to the cyclical nature of the drainage and associated symptomatology. A shave biopsy was performed to confirm our suspicions. Histopathological examination demonstrated endometrial, glandular stroma with scattered hemorrhages, confirming cutaneous endometriosis. (**Figure 1B**) Cutaneous endometriosis comprises less than one-percent of all cases, with primary cutaneous endometriosis accounting for a fraction of those cases.[1] Secondary cutaneous endometriosis or scar endometriosis, is associated with prior abdominal or pelvic surgery.[2] Umbilical endometriosis comprises

30-40% of cutaneous endometriosis locations, however scars from previous appendectomy and cesarean-sections have also been reported.[1] Theories have been proposed in regards to the pathogenesis of primary endometriosis including hematologic or lymphatic seeding of endometrial tissue. Due to the patient's lack of surgical history, this classifies the patient's condition as primary or spontaneous in nature.

Upon further questioning, the patient endorsed years of dysmenorrhea, which made her gynecologic provider concerned for endometriosis; however, the patient could not afford further work-up. Due to the scarcity of this condition, treatment has not been standardized. Complete umbilical resection and lesional excision are surgical modalities to prevent recurrence of the lesion. Hormone therapy with gonadotropin-releasing hormone agonists is used to relieve associated pain and diminish the size of the lesion; however, it is not a curative therapy. Laparoscopic surgery to identify other pelvic pathology for patients with history of subfertility or dysmenorrhea has been shown to be a consistent practice throughout the literature. Up to 25% of umbilical endometriosis occurs with concurrent pelvic endometriosis which can be treated laparoscopically.[3]

This case demonstrates how dermatologists may be implicated in women's reproductive health. Because cutaneous manifestations may be the first or only clue to underlying systemic endometriosis, which is a known contributor to infertility, their role is critical. Once identified, dermatologists may alert patients to the possibility of pelvic involvement, prompting imaging and further fertility evaluation.

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