

Pseudoverrucous Papules and Nodules Around a Surgical Stoma

Apaopa Jemima Thekho, MD; V. Ramesh, MD; Shanta Passi, MD

PRACTICE POINTS

- Pseudoverrucous papules and nodules (PPNs) can develop around stomas due to chronic irritant dermatitis from fecal or urinary exposure.
- Proper stoma management, including the use of appropriately sized stoma bags and frequent changes, is essential to prevent skin complications such as PPN.
- When evaluating peristomal lesions, consider a broad differential diagnosis, including infections, neoplasms, and dermatitis, and ensure thorough clinicopathologic correlation for accurate diagnosis and treatment.

To the Editor:

A 22-year-old man was referred to our dermatology outpatient department for wartlike growths that gradually developed around a postoperative enteroatmospheric fistula and stoma over the past 4 months. The patient presented for an emergency exploratory laparotomy with a history of perforation peritonitis 1.5 years prior to the current presentation. He also had a small bowel obstruction 5 months prior to the current presentation that resulted in the resection of a large segment of the small bowel. He underwent a diverting loop ileostomy when the abdominal closure was not achieved because of bowel edema, following which he developed a postoperative enteroatmospheric fistula. In addition, the stoma retracted and was followed by dermal dehiscence, which led to notable leakage and resulted in heavy fecal contamination of the midline wound.

At the current presentation, physical examination revealed multiple grayish-white, dome-shaped, moist papules coalescing to form a peristomal pseudoverrucous mass on the lower side of the stoma (Figure 1). The patient experienced mild itching. The lesion showed no signs of erosion, bleeding, or purulent discharge, and there were no nearby lumps or enlarged lymph nodes. The differential diagnosis included peristomal pyoderma gangrenosum, human papillomavirus (HPV) infection, pseudoverrucous papules and nodules (PPNs), squamous cell carcinoma, and exuberant granulation tissue. A skin biopsy was performed, and histopathology revealed hyperkeratosis, moderate papillomatosis, and marked



FIGURE 1. A grayish-white, dome-shaped peristomal pseudoverrucous lesion on the lower side of a stoma.

From the Department of Dermatology and STD, ESIC Medical College, NIT-3, Faridabad, India.

The authors have no relevant financial disclosures to report.

Correspondence: Apaopa Jemima Thekho, MD (thekho9@gmail.com).

Cutis. 2025 March;115(3):E19-E20. doi:10.12788/cutis.1187

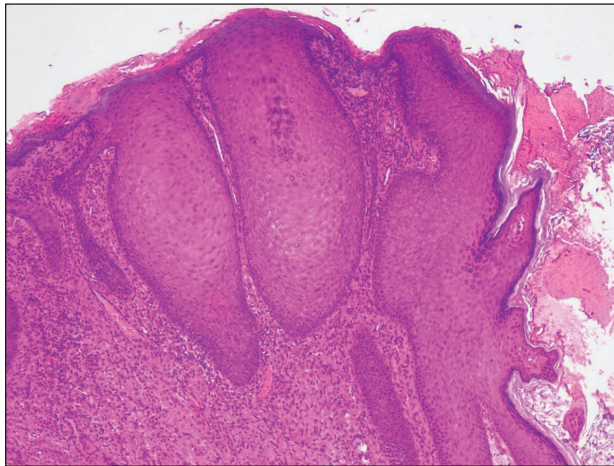


FIGURE 2. Histopathology revealed hyperkeratosis, moderate papillomatosis, and marked acanthotic hyperplasia extending into the dermis, consistent with a diagnosis of pseudo verrucous papules and nodules (H&E, original magnification $\times 40$).

acanthotic hyperplasia seen as downgrowths into the dermis (Figure 2). No koilocytes, atypia, or mitotic figures were present. Abundant neutrophils and few eosinophils were seen in the dermal infiltrate. A final diagnosis of PPN was made based on clinicopathologic correlation. The patient was advised to use a smaller stoma bag and to change the collection pouch frequently to reduce skin contact with fecal matter.

Peristomal skin conditions are reported in 18% to 55% of patients with stomas and include allergic contact dermatitis, mechanical dermatitis, infections, pyoderma gangrenosum, and irritant contact dermatitis.^{1,2} Pseudo verrucous papules (also called chronic papillomatous dermatitis or pseudo verrucous lesions) is a rare dermatologic complication found on the skin around stomas,³ most commonly around urostomy stomas. The presence of PPNs around colostomy stomas and the perianal region is extremely rare.^{2,4} This condition is the result of chronic irritant dermatitis from frequent exposure to urine or feces, leading to maceration and epidermal hyperplasia. It occurs because of improper sizing of the stoma bag or incorrect positioning or construction of the stoma.⁵

A few cases of PPN have been reported in women due to the overuse of topical benzocaine-resorcinol, leading to chronic irritation.⁶ It is clinically characterized by multiple grayish-white, wartlike, confluent papulonodules around areas chronically exposed to moisture. Differential diagnoses such as secondary neoplasms, HPV infection, exuberant granulation tissue, and candidal infections should be considered.³ Final diagnosis is based on clinicopathologic findings, similar to our case. Epidermal growth factor and transforming growth factor are thought to play a role in the pathophysiology of pseudoepitheliomatous hyperplasia. Increased expression of these mediators leads to proliferation of the epidermis into the dermis.⁷ The role of HPV in PPN remains unclear, as not all PPN lesions are positive for HPV and the cutaneous lesions resolve once the source of irritation is removed. Recommended treatment includes local skin care; stoma refitting; and, in severe cases, excision and revision of the stoma.² Dermatologists must be aware of this often-underdiagnosed condition.

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