Persistent Perianal Dermatitis Associated with Mucosal Hemorrhoidal Prolapse

To the Editor:

Perianal dermatitis is a common acute to chronic and usually extremely pruritic eczema of the area around the anal orifice.[1] It affects a humid, dark, and mechanically traumatized region that usually has a high concentration of bacteria. Any increase in moisture, such as that caused by occult and overt soiling, leads to maceration and reduced barrier function.[2] Skin irritation caused by proteolytic enzymes found in rectal mucoid secretions creates erythema, edema, and pruritus, sometimes accompanied by stinging and burning sensations. Thus, any variations in the anal anatomy that produce soiling can be responsible for perianal dermatitis.[3]

Grade III and grade IV hemorrhoids and anal tags, polyps, fissures, and fistulas are causes of overt soiling and are evident upon dermatologic examination.[4] Contrarily, internal mucosal-hemorrhoidal prolapse, another cause of occult soiling, stays in the anal canal and cannot be seen through external inspection; it can be diagnosed only with a complete proctologic examination, which includes proctoscopy.[5]

In our experience, the diagnosis of this mucocutaneous disorder is often delayed for months, and patients are unsuccessfully treated with various topical treatment regiments aimed at curing one (or sometimes several) of the different diagnosed conditions listed in Table 1, without elimination of the real trigger.

With the collaboration of dermatologists and colorectal surgeons during 2008, 15 patients (9 males and 6 females, with an average age of 51 years) were examined for perianal dermatitis and occult anorectal diseases. They underwent complete skin inspection, proctologic examination with proctoscopy, and perianal swabs. Anorectal manometry and colonoscopy were performed to exclude fecal incontinence, bowel inflammatory diseases, and neoplasms.

The typical presentation included perianal skin maceration and various degrees of bright pink moist erythema, often accompanied by signs of inflammation, such as superficial edema, infiltration, and tenderness. The clinical signs were sometimes obscured by topical pretreatment (zinc paste, antimycotic and antibiotic ointments), but pruritus was always present. In all cases, proctologic examination revealed mucosal-hemorrhoidal prolapse.

Results of microbiologic analysis of perianal swabs were positive for seven patients. *Staphylococcus aureus*, which was isolated in six cultures, was the most common infectious agent.

When necessary, prolapsectomy was followed by medical treatments, which were successful in all cases. Potassium permanganate reduced erythema and pruritus in all patients, and antibiotic treatment based on swab results was prescribed for seven patients to eliminate bacterial infection. At follow-up, which ranged from 18 months to 2 years, no patients had symptom recurrences.

Clinical features, physical examination results, proctoscopy results, microbiologic analysis results, and specific treatments are summarized in Table 2.

We wish to emphasize the importance of collaboration between dermatologists and colorectal surgeons to discover and eliminate the provoking factor of perianal dermatitis. Among the different diagnostic procedures (which include patch testing, stool examination for ova and parasites, and bacteriologic and fungal cultures of stool and the perianal region), proctologic examination plays a primary role. In fact, up to 52% of patients with this cutaneous alteration have anorectal diseases, which in most cases show no other signs or symptoms.[4] For this reason, every patient with an unclear perianal dermatitis needs a meticulous proctologic examination.

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Table 1. Differential Diagnoses of Perianal Dermatitis

Category	*Causes*
Contact dermatitis (allergic, toxic)	Toilet paper, cleansers, suppositories, hemorrhoidal ointments
Irritant dermatitis	Poor hygiene, soiling (hemorrhoid, fistula, fissure), inflammatory bowel diseases
Infectious dermatitis	Candidiasis, tinea inguinalis, oxyuriasis, perianal streptococcal dermatitis, condyloma acuminatum, condyloma latum, rectal gonorrhea
Neoplasm	Bowen disease, extramammary Paget disease, anal basal cell carcinoma
Dermatoses extended to other areas	Lichen planus, lichen sclerosus, psoriasis, seborrheic dermatitis, atopic dermatitis, Darier disease

Table 2. Demographics, Clinical Features, and Treatment of Patients with Perianal Dermatitis

Patient No.	*Sex*	*Age (yr)*	*Physical Examination Results*	*Proctologic Examination Results*	*Symptoms*	*Culture Results*	*Treatment*	*Therapeutic Response*
1	M	19	Perianal erythema, wet anus, maceration	M-H P II	Pruritus, bleeding, pain on defecation	N	P, PP	Good
2	M	61	Perianal erythema, wet anus, excoriations	M-H P II	Pruritus, burning sensation	MSSA	P, PP, amoxicillin + clavulanic acid	Good
3	M	43	Perianal erythema, wet anus, excoriations	M-H P II	Pruritus, burning sensation	MSSA	P, PP, amoxicillin + clavulanic acid	Good
4	M	68	Perianal erythema, wet anus, dyschromia	M-H P II	Pruritus, bleeding	N	P, PP	Good
5	M	61	Perianal erythema, wet anus	M-H P II	Pruritus	N	P, PP	Good
6	F	79	Perianal erythema, wet anus, maceration, excoriations	M-H P II	Pruritus, burning sensation, bleeding	MSSA, *E. coli*	P, PP, amoxicillin + clavulanic acid	Good
7	M	29	Perianal erythema, wet anus	M-H P II	Pruritus	N	P, PP	Good
8	M	69	Perianal erythema, wet anus, maceration	M-H P II	Pruritus, burning sensation	*E. coli*, *Acinetobacter baumannii*	P, PP, imipenem	Good
9	M	58	Perianal erythema, wet anus, excoriations	M-H P II	Pruritus	MSSA	P, PP, amoxicillin + clavulanic acid	Good
10	F	51	Perianal erythema, wet anus	M-H P II	Pruritus	N	P, PP	Good
11	F	43	Perianal erythema, wet anus	M-H P II	Pruritus, bleeding	N	P, PP	Good
12	F	27	Perianal erythema, wet anus	M-H P II	Pruritus, bleeding	N	P, PP	Good

Table 2. Cont.

Patient No.	*Sex*	*Age (yr)*	*Physical Examination Results*	*Proctologic Examination Results*	*Symptoms*	*Culture Results*	*Treatment*	*Therapeutic Response*
13	F	60	Perianal erythema, wet anus, excoriations	M-H P II	Pruritus	MRSA	P, PP, vancomycin	Good
14	F	38	Perianal erythema, wet anus, excoriations	M-H P II	Pruritus	N	P, PP	Good
15	M	67	Perianal erythema, wet anus, excoriations	M-H P II	Pruritus, burning sensation	MSSA, *E. coli*	P, PP, amoxicillin + clavulanic acid	Good

E. coli = *Escherichia coli*; F = female; M = male; M-H P II = mucosal-hemorrhoidal prolapse, grade II; MRSA = methicillin-resistant *Staphylococcus aureus*; MSSA = methicillin-sensitive *Staphylococcus aureus*; N = negative; P = prolapsectomy; PP = potassium permanganate.

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