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Case Study
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# RECALCITRANT ANAL ULCERATION REVEALS AN EROSIVE LICHEN PLANUS MAKING IT A DIAGNOSTIC AND THERAPEUTIC CHALLENGE

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#### RESUME

Erosive LP is an unfamous variant of LP presenting with painful ulcerations and scarring, affecting frequently females. It's diagnostic is histological. As erosive lichen planus occurs in numerous locations; symptoms can often be mistaken. It is often debilitating and resistant to therapy making it a diagnostic and therapeutic challenge.

**KEYWORDS:** Lichen planus Pruritus Peri anal ulceration Corticosteroid.

#### BACKGROUND

Lichen planus (LP) is an inflammatory disorder that can affect both skin; including scalp and nails, and mucosal surfaces such as oral and genital areas.

Clinical manifestations are variable and may be observed either in multiple locations or isolated in a single anatomic site.

The disorder is more common in females<sup>[1]</sup> with a sex ratio of 3:1 and usually starts in the  $5^{th}$  or  $6^{th}$  decade of life.<sup>[1]</sup>

The first description of the erosive form of LP was published in 1869 by Erasmus Wilson where he reports lesions affecting the oral cavity. [2] It was not until many years later that the connection between genital erosions and LP was established. [3]

Here we report a case of a young female with an isolated location of erosive anal lichen planus.

#### CASE REPORT

A twenty-four-year-old women was referred to our Dermatology department with intense pruritic and tender perianal lesions of two months duration.

The lesions had remained stable since onset with no other reported lacerations elsewhere on the body.

Medical history was notable for Familial adenomatous polyposis complicated with a colorectal adenocarcinoma.

The patient underwent an open coloprotectomy with ileo -anal J pouch reconstruction.

Physical examination revealed multiple, painful, sharply defined linear erosions with no fibrin or necrosis, slightly infiltrated with normal skin intercalating in between. (figure 1)

No lymphadenopathies were noted.

Rectoscopy was unpassable due to stenosis.

Bacterial sampling, syphilitic serologies and also f TZANK smear and CPR for HSV all came back negative. A punch biopsy of the perianal region revealed epidermal changes including hypergranulosis, hyperkeratosis and basal cell vacuolization.

The diagnostic of erosive anal lichen planus was given.

The patient was prescribed a course of corticosteroids cream with notable improvement after three months.

#### **DISCUSSION**

Erosive lichen planus is an exceedingly rare variant of LP.

It commonly presents as chronic painful erosions that often evolve to scarring, obstruction and tissue destruction.

While it is most commonly known to affect genital and oral mucosa, other locations have been reported<sup>[4] [5]</sup> such as palmoplantar skin, lacrimal duct, external auditory meatus and also the esophagus.

However, according to a PubMed search of indexed articles for MEDLINE, only two cases had isolated perianal erosive LP<sup>[6]</sup>, which makes it extremely rare location.

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Anal LP manifest as very painful, periodically pruritic and well-defined ulcerations arising few centimeters from the anus with whitish and purple borders. Reticulate and erythematous lesions are often found adjacent to the ulcerative area. Most of the affections occurs unilaterally although bilateral presentation had been also noted. [6]

It is important to rule out others causes of anal ulceration that may mimic LP, primarily Crohn's disease, extramammary Paget disease, Behcet disease, Lichen simplex chronicus, hemorrhoids or malignancy. [6]

In immunocompromised patients, viral etiologies may be considered such as perianal CMV<sup>[7]</sup> that can represent a diagnostic challenge. Anal erosion can also be caused by medications such as methotrexate and

immunosuppressant in general that can induce non melanoma skin cancer.  $^{[8]}$ 

Histologically, LP is characterized by an important perivascular lymphohysticoytic infiltration at the dermo-epidermal junction. Acanthosis, hyperkeratosis, hypergranulosis and basal cell vacuolization represent other distinguishing features. [6]

Treatment of LP relies primarily on corticosteroids. However, their efficacy for mucosal surfaces is still questionable. A literature search concerning erosive anal lichen planus revealed a good response with a combination therapy of both high potency topical steroids and calcineurin inhibitors with improvement f the lesions within 3 to 4 weeks. [9] [10]



Figure 1: multiple, painful, sharply defined linear erosions with no fibrin or necrosis.

#### CONCLUSION

As erosive lichen planus occurs in numerous locations; symptoms can often be mistaken. Skin biopsy with pathological correlation along with a throughout medical history and a meticulous physical examination are key to conclude with to the diagnostic of erosive anal lichen planus. A multispecialty approach is crucial in the handling of this condition in an effort to give suitable care and ward off physical and psychological sequelae.

#### **Abbreviations**

LP: Lichen planus.

CPR: polymerase chain reaction.

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