

# Leukoplakia of the Anal Verge with Bleeding Hemorrhoids. A Case Report

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## RESUMEN

Hombre de 45 de con hemorroides sangrantes grado II, en quien se identificó lesión circunferencial leucoplásica en el borde anal. El paciente no tenía ningún síntoma de leucoplasia. La hemorroides fue removida por ablación con un dispositivo de radiofrecuencia Ellman. Los resultados histológicos demostraron hiperqueratosis y acantosis del borde anal a la línea dentada. En el seguimiento a cinco años no se observó evidencia de cambios displásicos en la lesión. Debido a las controversias respecto a la leucoplasia del canal anal, los pacientes deben ser seguidos cuidadosamente para identificar cualquier transformación maligna.

## SUMMARY

We present a case of a 45 year old patient who reported bleeding hemorrhoids. He had grade II hemorrhoids and was found to have a circumferential leukoplakic lesion at the anal verge. The patient had no symptoms of leukoplakia. The hemorrhoids were ablated with a Ellman radiowave device. Histological findings of the incised lesion from the verge showed hyperkeratosis and acanthosis extending cephalad from the anal verge to the dentate line. Follow up after 5 years revealed no evidence of dysplastic changes in the leukoplakic lesion. Because of the varied opinion regarding the fate of leukoplakia of the anal canal, the patients should be followed carefully to detect any malignant transformation of the lesion.

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## Clinical case

On 14th August 2002, a 45-year old male, an office clerk, reported with bleeding and prolapse per rectum for 6 months. He did not complain of any pain, pruritus or discharge per anus.

Upon anal and intra anal examination, there was a circumferential area of thickening and whitish discoloration of the anal verge which was extending up to the dentate line. The perianal skin was macerated, excoriated and thickened, suggestive of leukoplakia (figure 1). Anoscopy showed prolapsing hemorrhoids.

The patient did not give any history of previous anal surgery, homosexual contact or exposure to any radiations. He was using various hemorrhoidal ointments in and around the anus since for the last four months. Test for HIV virus was negative.

The hemorrhoids were ablated using a Ellman radiowave generator (Ellman International Inc., Oceanside, NY, USA) under local anesthesia with the patient in a lithotomy position. A biopsy was taken



Figure 1. Leukoplakia of the anus

from the anal verge and the patient was discharged after 2 hours. He was asked to follow-up after 4 weeks.

The microscopic picture of the biopsied anal skin showed pronounced cornification of the anoderm. Acanthosis was prominent, but the rete cells were orderly and the basal layer was well defined. The dermis showed profuse chronic inflammation, with

## Palabras clave

leucoplasia  
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## Key words

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lymphocytes, plasma cells and large mononuclear cells in the papillary layer.

At the 4-week follow-up, the patient was asymptomatic. The wound of biopsy was healed and the hemorrhoids were not seen. The patient was asked to report every year or earlier if he had any symptoms. At the last follow-up in October 2007, the patient had no specific anal symptoms except hematochezia at times. The leukoplakic area was unchanged.

## Discussion

Leukoplakic lesions are seen most commonly in the oral cavity, in men more often than women at that site. They occur somewhat less frequently on the vulva. The bladder, kidney, pelvis, ureters, larynx, esophagus, cervix and glans penis are occasionally involved.<sup>1</sup> Extensions of primary vulvar leukoplakic lesions with involvement of the perineum and perianal skin have been described in the literature. Primary leukoplakia on the anoderm of the anal canal is occasionally reported. The lesions developed on the so-called "mucosa" or anoderm of the anal canal, with some extension to the adjacent rectal mucosa.

Leukoplakia is considered as a precancerous dermatosis of mucous membranes analogous to senile keratosis of exposed skin surfaces.<sup>2</sup> Several patients with carcinoma in-situ had a discrete area of leukoplakia in the anal canal or a pigmented plaque of the anus and anal canal.<sup>3</sup> However, in the present case, the leukoplakia was absolutely innocuous. No change in the color, texture or extension of the lesion was noticed over a period of five years in this patient.

The cause of leukoplakia is still a controversial subject.<sup>4</sup> Earlier investigators indicate syphilis as a prominent factor in oral lesions. Deficiencies of vitamin A, hydrochloric acid, vitamin C and estrogens have been mentioned as causative factors in vulvar leukoplakia. Excessive excretion of irritating organic urinary acids has also been considered.<sup>5</sup> Other investigators consider that prolonged local irritation from any cause, acting on a deficient, aging epithelium, is a fundamental cause of this lesion.<sup>6</sup> The author considers that probably a continuous use of hemorrhoidal cream was the cause of leukoplakia in this patient. Though the

patient has used many hemorrhoidal creams, one ingredient was common in all of them, and it was Hydrocortisone Acetate. Studies have shown that prolonged use of topical steroids can lead to leukoplakia of the larynx<sup>7</sup> and oral cavity.<sup>8</sup> Similar mechanism might be responsible in this patient who was applying creams containing topical steroid around the anus. Correctly interpreted preliminary biopsy will serve as a guide for a proper therapeutic approach.<sup>9</sup>

The follow-up of our case proves that there is little evidence that leukoplakia of the anal canal is premalignant, but patients should be followed carefully, since the natural history of this rare lesion is unknown.

## References

1. Bender MD, Lechago J. Leukoplakia of the anal canal. *Am J Dig Dis* 1976;21(10):867-872.
2. Templeton JL, Brennen MD. Anal leukoplakia: management using a staged plastic procedure. *J R Coll Surg Edinb* 1991;36(5):333-334.
3. Jongen J, Reh M, Bock JU, Rabenhorst G. Perianal precancerous conditions (Bowen disease, Paget disease, carcinoma in situ, Buschke-Lowenstein tumor). *Kongressbd Dtsch Ges Chir Kongr* 2001; 118:79-86.
4. Riedler L. Bowenoid leukoplakia in the anal region. *Klin Wochenschr* 1988;66:271-273.
5. Foust RL, Dean PJ, Stoler MH, Moinuddin SM. Intraepithelial neoplasia of the anal canal in hemorrhoidal tissue: a study of 19 cases. *Hum Pathol* 1991;22(6):528-534.
6. Del Río M, de Maturi RH, Maturi HV. Postoperative anus stricture and leukoplakia lesions. *Acta Gastroenterol Latinoam* 1987;17(4):337-342.
7. DelGaudio JM. Steroid inhaler laryngitis: dysphonia caused by inhaled fluticasone therapy. *Arch Otolaryngol Head Neck Surg* 2002;128(6):677-681.
8. Lozada-Nur F, Robinson J, Regezi JA. Oral hairy leukoplakia in non immunosuppressed patients. Report of four cases. *Oral Surg Oral Med Oral Pathol* 1994;78(5):599-602.
9. Kreuter A, Brockmeyer NH, Wieland U; German Competence Network HIV/AIDS. Irregularly shaped leukoplakic lesion of the anus. Diagnosis: anal intraepithelial neoplasia (AIN). *Clin Exp Dermatol* 2007;32(5):621-631.