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Clinical Case

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Bullous pemphigoid and its correlation with prostate cancer: a case report and literature review

Abstract

Background: Bullous pemphigoid belongs to the group of subepidermal autoimmune blistering diseases characterized by the production of autoantibodies against various components of the basement membrane. These antibodies are of the IgG class and bind primarily to two hemidesmosomal proteins, BP180 and BP230 antigens. In Mexico, there are no epidemiological reports; however, isolated case reports have been described.

Clinical case: An 80-year-old male with a history of poliomyelitis presented with disseminated dermatosis involving the anterior thorax, posterior thorax, and both extremities. The condition was characterized by polymorphic vesiculobullous lesions, multiple in number, ranging from 0.3 to 3.7 cm, with an erythematous base, intensely pruritic, and associated with hemorrhagic crusts and excoriations. Histopathological examination revealed multiple subepidermal blisters with a predominance of eosinophils, hyperkeratosis with a "basket-weave" pattern, and eosinophilic spongiosis, findings consistent with bullous pemphigoid. Blood tests showed prostate-specific antigen levels above normal limits, suggestive of malignancy. A PET scan demonstrated overexpression of type 2 carboxypeptidase receptors of neoplastic origin in the prostate, with infiltration into the right seminal vesicle and probable rectal involvement.

Conclusions: Bullous pemphigoid and its association with prostate cancer is an uncommon clinical occurrence. It is recommended that both conditions be addressed with equal clinical priority and that treatment be initiated promptly to halt the progression of dermatologic lesions, reduce the risk of metastatic dissemination associated with prostate cancer, and prevent long-term functional sequelae.

Keywords: bullous pemphigoid, prostate cancer, skin

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Héctor de Jesús Morales Santos,[1] Dulce María Pineda Lozano,[2] Lucía Achel Nava,[3] Karla Alejandra López,[4] Hugolino Martínez Liévano,[5] José Giovanni López Muciño[6]

[1]Médico residente de tercer año de Medicina Interna del Hospital Regional General Ignacio Zaragoza ISSSTE, Mexico
[2]Médico residente de cuarto año de Medicina Interna del Hospital Regional General Ignacio Zaragoza ISSSTE, Mexico
[3]Médico especialista en Dermatología adscrita al Centro Médico Nacional 20 de Noviembre ISSSTE, Mexico
[4]Médico especialista en Patología Clínica adscrita al Hospital Regional General Ignacio Zaragoza ISSSTE, Mexico
[5]Médico Internista y subespecialista en Medicina Critica y Terapia Intensiva adscrito al Hospital Regional General Ignacio Zaragoza ISSSTE, Mexico
[6]Médico Internista, profesor titular y subdirector del Hospital Regional General Ignacio Zaragoza ISSSTE, Mexico

Correspondence: Héctor de Jesús Morales Santos, Third-year resident physician in Internal Medicine, Ignacio Zaragoza General Regional Hospital, ISSSTE, Mexico, Tel +52 55 48 17 26 58

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Background

Ampoule pemphigoid belongs to the group of subepidermal autoimmune ampullary diseases that are characterized by the production of autoantibodies against different components of the basement membrane, these antibodies are of the IgG class and are mainly linked to 2 hemidesmosomic proteins, the antigens BP180 and BP230,[1,2] clinically characterized by the formation of ampoules at skin level and mucous membranes with negative Nikolsky sign.[3,4] It represents a straightforward diagnosis that contains many possible etiologies associated with ampullary diseases, with neoplastic causes being the rarest. In Mexico, there are no epidemiological reports, but there are reports of isolated cases. The case of a patient with ampullosal pemphigoid and diagnosis of prostate cancer is reported.

Clinical case

80-year-old male with a history of polio, no smoking, no alcoholism, no other important history. Consult in February 2025 at the Internal Medicine Service due to unspecified weight loss, intermittent fever and initial lesions like vesicles and tense ampoules of serous content on an erythematous base, pruritic, on both plantar sides which generalize to the anterior thorax, posterior thorax and both extremities (Figure 1), negative lesions in the oral mucosa, reason for which he decides See a private doctor who offers management based on itraconazole, pentoxifylline, procaine penicillin G and miconazole (doses not specified), without improving your injuries.

Physical examination presents extensive erythematous-edematous, polymorphic plaques, pinkish in color, with central erosions, crowned by vesicles and tense ampoules, filled with clear liquid and hemorrhagic streaks scattered across the anterior thorax, posterior thorax, abdomen, upper extremities, lower extremities, with no lesions observed in the mucous membranes. Nikolsky's sign was negative (Figure 2).

Figure 1 Vesicles and ampoules that surround the anterior thorax, extremely itchy, with scratchy hues.

Figure 2 Disseminated dermatosis characterized by vesicle-type lesions and polymorphous ampoules, multiples of 0.3 to 3.7 cm, with an erythematous base, and the presence of hematic ribs as well as excoriations.

The paraclinical studies showed: glucose: 102 mg/dl, creatinine: 1.20 mg/dl, blood count: leukocytes: 4.7 10^3/uL, hemoglobin: 12.6 g/dl, platelets: 233 10^3/uL, elevated C-reactive protein (51.94 mg/L), anti-cell antibodies and anti-body antibodies negative neutrophil cytoplasm, normal complement levels (C3: 158.58 mg/dl, C4: 23.84 mg/dl), non-reactive viral panel, normal radiographic bone series, free prostate antigen (1.21 ng/dl) and specific prostate antigen (25.68 ng/ml) both tests outside normal limits suggestive of malignancy.

Before the suspicion of ampullosal pemphigoid, a skin biopsy was performed from the edge of a recent vesicular lesion on the lower right extremity. The histology reported a superepidermal ampoule with a predominance of eosinophils, hyperkeratosis with a "canasta red" pattern and eosinophilic spongiosis (Figure 3).

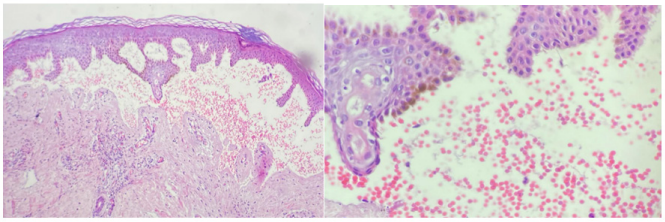

Figure 3 Skin biopsy of a subepidermal vesicle from the lower extremity of the right side stained with hematoxylin-eosin, which found anucleated corneocytes, hyperkeratosis in a network of bones, keratinocytes with basophilic granules, acantosis and elongation of interpapillary ridges. In the second image there is the presence of abundant extravasated erythrocytes with a superficial perivascular inflammatory infiltrate of lymphocytic predominance and irregular dense connective tissue.

Due to a history of considerable elevation of prostate antigen and suspicion of probable paraneoplastic syndrome, a full-body PET scan was performed, finding a prostate with heterogeneous density due to solid areas with hypodense portions and the presence of nodular lesions. The study was concluded with evidence of overexpression of type 2 carboxypeptidase receptors of neoplastic origin in the prostate with infiltration of seminal vesicle leaks and probable infiltration into the rectum (Figure 4). Prostate biopsy cannot be performed due to poliomyelitis which makes it difficult to adopt a fetal position during lithotomy.

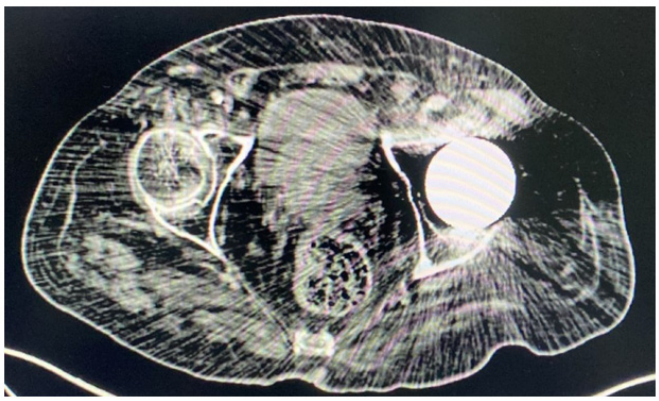

Figure 4 Images on a SIEMENS BIOGRAPH MCT equipment with diagnostic computed tomography with multidetection helical mode.

During hospitalization, disease control was achieved with topical steroids, systemic steroids reduced to a dose of 0.5 mg/kg, topical antibiotics (fusidic acid) and oral antihistamines. Comprehensive management with urology and medical-surgical oncology was carried out when the decision was made to initiate dosage-response hormonal therapy (Docetaxel), and azathioprine was started with good tolerance and adherence to the same. The clinical response was satisfactory, reducing pruritus and gradual improvement of skin lesions and post-inflammatory macules within a period of 5 weeks of treatment (Figure 5). Total radical prostatectomy is not ruled out in the future.

Figure 5 Clinical evolution in the case. Control 5 weeks after the beginning of the treatment with evident improvement, with the presence of post-inflammatory macules.

Discussion

The prevalence of ampullosal pemphigoid worldwide is low. In the year 2022, through a systemic review and a meta-analysis, 3967 articles were evaluated, from which only 57 articles were found, which had adequate quality and quantity of analysis, presenting a total incidence of 0.0419 per 1000 people/year worldwide. North America had an incidence of 0.047 per 1000 people per year, Europe with 0.419 per 1000 people per year, Asia with 0.0072 per 1000 people per year and Africa with 0.003 per 1000 people per year. The incidence by age group was divided into 5 groups, with the group aged 80 to 89 having 0.011 per 1000 people per year. Female sex was the one that had a higher incidence, while male sex had a much lower incidence.[5] In contrast to the previous one, the description of a nine-decade patient with ampulous pemphigoid is of interest as it is a relatively common presentation.

In Mexico, in the article published in 2025 by Stefania Montero and Collaborators, from the year 2021 to 2023 evaluating the different ampullary diseases at the General Hospital of Mexico in the City of Mexico, from a total of 11,889 patients seen in consultation, 59 cases of ampullary diseases were reported with the following distribution: 42 cases of pemphigus vulgaris, 9 cases of ampullosus pemphigoid, 5 of pemphigus foliaceus, 1 case of seborrheic pemphigus, 1 case of mucous pemphigoid and 1 case of pemphigus without precise diagnosis.[6]

A retrospective and descriptive study of patients from the Dermatology Service carried out at the Hospital General Dr. Manuel Gea González in the City of Mexico in the year 2013 showed the correlation of ampullosal pemphigoid with chronic illnesses that in the order of presentation include arterial hypertension, type 2 diabetes, dyslipidemia, cerebrovascular events, prostate cancer, psoriasis, ependymon and vitiligo.[7]

The association between ampullosal pemphigoid and neurological diseases such as senile dementia, Alzheimer's disease and vascular disease related to advanced age has been studied.[8] Our patient does not have to deal with chronic degenerative diseases, which is why he extended his diagnostic protocol in search of a possible oncological cause.

The association of pemphigoid with polymorphic skin lesions and neoplastic diseases is less frequent within which it is possible to find Hodgkin's Lymphoma, Chronic Lymphocytic Leukemia, Castlemans

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Disease, Sarcomas,[9] and within other neoplasms lung cancer is found at a lower frequency, skin cancer (in melanoma), colorectal cancer, breast cancer, pancreatic cancer and prostate cancer.[10]

During the patient's approach, the use of paraclinical and imaging studies was decisive for making decisions about his management. During the follow-up, certain experts guided us to investigate malignancy: advanced age, B symptoms, elevation of prostate antigen and nuclear medicine with evidence of type 2 carboxypeptidase receptors of neoplastic origin in the prostate.

Multidisciplinary management was crucial. Clinical improvement was achieved in the patient after the use of topical steroids, systemic steroids, antihistamines and taxanes (Docetaxel) with progressive improvement in his dermatological lesions. This case highlights the correlation of oncological processes with ampullosal pemphigoid, signaling prostate carcinoma as an unusual phenomenon.

Conclusion

Ampullary pemphigoid and its correlation with prostate cancer are rare. In this clinical case, during the initial approach, high levels of prostate antigen were documented and the presence of vesicular-ampullary lesions were suspected of paraneoplastic pemphigoid, forcing us to carry out a multidisciplinary diagnostic approach, which is why it is suggested to approach both entities equally (regardless of severity) and begin treatment early with the aim of stopping its evolution of dermatological lesions, avoid possible metastasis foci caused by prostate cancer and prevent functional sequelae.

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Conflicts of interest

The authors declare there is no conflicts of interest.

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References

1. Fuertes de Vega I, Iranzo-Fernández, P, Mascaró-Galy JM. Ampullosus pemphigoid: practical management guide. *Dermo-Syphiliographical Annals*. 2014;105(4):328–346.
2. Beutner EH, Lever WF, Witebsky E, et al. Autoantibodies in Pemphigus Vulgaris. *JAMA*. 1965;192(8):682–688.
3. Nguyen VT, Ndoye A, Bassler KD, et al. Classification, clinical manifestations, and immunopathological mechanisms of the epithelial variant of paraneoplastic autoimmune multiorgan syndrome: a reappraisal of paraneoplastic pemphigus. *Arch Dermatol*. 2001;137(2):193–206.
4. Schmidt E, della Torre R, Borradori L. Clinical features and practical diagnosis of bullous pemphigoid. *Dermatol Clin*. 2011;29(3):427–438, viii–ix.
5. Persson MSM, Begum N, Grainge MJ, et al. The global incidence of bullous pemphigoid: a systematic review and meta-analysis. *Br J Dermatol*. 2022;186(3):414–425.
6. Lu L, Chen L, Xu Y, et al. Global incidence and prevalence of bullous pemphigoid: A systematic review and meta-analysis. *J Cosmet Dermatol*. 2022;21(10):4818–4835.
7. Cai SCS, Allen JC, Lim YL, et al. Association of bullous pemphigoid and malignant neoplasms. *JAMA Dermatology (Chicago, Ill.)*. 2015;151(6):665–667.
8. Nieto-Benito LM, Suárez-Fernández R. Ampoule pemphigoid and neurological comorbidity: does it cause or result? Single-center retrospective study of 257 patients. *Dermo-Syfiliographical Annals*. 2025;116(8):T807–T814.
9. Anhalt GJ, Kim SC, Stanley JR, et al. Paraneoplastic pemphigus. An autoimmune mucocutaneous disease associated with neoplasia. *N Engl J Med*. 1990;323(25):1729–1735.
10. Solís-Arias MP, Rodríguez-Gutiérrez G, Rodríguez-Carreón AA, et al. Ampullosus pemphigoid: case series of 32 years. *Gaceta Médica de Méxixo*. 2013;149:344-348.