

Abordagem multiprofissional para o paciente acometido por pênfigo vulgar

Multi-professional care for the patient affected by pemphigus vulgaris

Atención multi-profesional para lo paciente afectado por pênfigo vulgar

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Resumo

Pacientes acometidos por pênfigo vulgar necessitam de cuidados especializados. Assim, para assistência integral destes é imprescindível a atuação multiprofissional para atender os diferentes desafios técnicos da doença. O objetivo foi relatar um caso de pênfigo vulgar e a atuação multiprofissional. Trata-se de um estudo descritivo do tipo relato de caso de paciente atendido em hospital de referência para pênfigo. Foram coletadas as informações necessárias para descrever o caso após a aprovação no Comitê de Ética em Pesquisa. O paciente chegou ao hospital apresentando lesões crostosas difusas com prurido associado em todo o corpo há aproximadamente dois meses. Após avaliação clínica e exames laboratoriais, verificou no exame histológico presença de bolha intraepidérmica supra-basal, com presença de células acantolíticas internas a bolha, concluindo como pênfigo vulgar. Durante o curso da internação o paciente apresentou várias infecções secundárias, usou corticosteroides, analgésicos, poliantibioticoterapia e imunoglobulina. Ao final de 78 dias de internação apresentou complicações evoluindo para o óbito. O diagnóstico precoce e o início do tratamento rápido retardam a evolução da doença melhorando o aspecto das lesões o que diminui o tempo de internação e o risco da ocorrência de infecções. Portanto, a atuação da equipe multiprofissional contribui na resolução dos desafios referente à doença, tais como: melhoria nos aspectos físicos, emocionais, nutricionais e segurança do paciente. Salientamos as medidas de prevenção e controle de infecções, como por exemplo, a higienização das mãos por todos profissionais, uso

de equipamentos de proteção individual no manejo do paciente e a adequada higienização do ambiente.

Palavras-chave: Pênfigo Vulgar; Cuidados de saúde; Equipe multiprofissional.

Abstract

Patients suffering from pemphigus vulgaris need specialized care. Thus, in their comprehensive care, multi-professional action is essential to meet the different technical challenges of the disease. The objective was to report a case of pemphigus vulgaris and multi-professional performance. This is a descriptive study of the case report of a patient seen at a referral hospital for pemphigus. The information necessary to describe the case was collected after approval by the Research Ethics Committee. The patient arrived at the hospital with diffuse crusty lesions with associated pruritus throughout the body for approximately two months. After clinical evaluation and laboratory examination, the histological examination found the presence of a supra-basal intraepidermal bubble, with the presence of acantholytic cells inside the bubble, concluding as pemphigus vulgaris. During hospitalization, the patient had several secondary infections, used corticosteroids, analgesics, polyantibiotic therapy, and immunoglobulin. At the end of 78 days of hospitalization, he developed complications and died. Early diagnosis and the start of rapid treatment delay the evolution of the disease, improving the appearance of the lesions, which reduces the length of hospital stay and the risk of infections occurring. Therefore, the performance of the multi-professional team contributes to solving the challenges related to the disease, such as improvement in physical, emotional, nutritional, and patient safety. We emphasize measures for the prevention and control of infections, such as, for example, hand hygiene by all professionals, the use of personal protective equipment in the management of the patient, and adequate hygiene of the environment.

Keywords: Pemphigus; Delivery of health care; Patient care team.

Resumen

Los pacientes que sufren de pénfigo vulgar necesitan atención especializada. Por lo tanto, en su atención integral, la acción multi-profesional es esencial para enfrentar los diferentes desafíos técnicos de la enfermedad. El objetivo fue reportar un caso de pénfigo vulgar y desempeño multi-profesional. Este es un estudio descriptivo del informe del caso de un paciente atendido en un hospital de referencia para pénfigo. La información necesaria para describir el caso se recopiló después de la aprobación del Comité de Ética en Investigación. El paciente llegó al hospital con lesiones crujientes difusas con prurito asociado en todo el cuerpo durante

aproximadamente dos meses. Después de la evaluación clínica y el examen de laboratorio, el examen histológico encontró la presencia de una burbuja intraepidérmica suprabasal, con la presencia de células acantolíticas dentro de la burbuja, que concluye como pénfigo vulgar. Durante el curso de la hospitalización, el paciente tuvo varias infecciones secundarias, usó corticosteroides, analgésicos, terapia con poliantibióticos e inmunoglobulina. Al final de los 78 días de hospitalización, desarrolló complicaciones y murió. El diagnóstico precoz y el inicio del tratamiento rápido retrasan la evolución de la enfermedad, mejoran la apariencia de las lesiones, lo que reduce la duración de la estancia hospitalaria y el riesgo de infecciones. Por lo tanto, el desempeño del equipo multi-profesional contribuye a resolver desafíos relacionados con la enfermedad, tales como: mejora en la seguridad física, emocional, nutricional y del paciente. Hacemos hincapié en las medidas para la prevención y el control de infecciones, como, por ejemplo, la higiene de manos por parte de todos los profesionales, el uso de equipos de protección personal en el tratamiento del paciente y la higiene adecuada del medio ambiente.

Palabras clave: Pénfigo vulgar; Cuidados de la salud; Equipo multi-profesional.

1. Introduction

Patients affected by pemphigus vulgaris need specialized care for the prevention of diseases, promotion of physical and mental well-being, and maintenance of life. The complexity of hospitalization relates with factors such as suffering, pain, the severity of the disease, and the deforming characteristics caused by the lesions. This disease consequently has repercussions on the social and emotional aspects of the patient. It is an autoimmune disease evidenced by the presence of specific autoantibodies to the stratified squamous epithelium. It still has unknown pathophysiology and severe prognosis (Dedee et al., 2020). To confirm the diagnosis, a histopathological examination demonstrating intraepidermal acantholytic vesicular dermatitis is necessary (Fonseca et al., 2017).

Is clinically characterized by the appearance of diffuse crusted lesions. Pemphigus vulgaris should be treated with corticosteroids, and these might or not be associated with other immunosuppressive drugs and immunoglobulins (Schmidt et al., 2020). Bursting the bubbles leads to painful, localized, or widespread erosion, leaving the individual predisposed to pain, infection, and infestation. The bubbles result from the separation of epidermal cells, a process called acantholysis, induced by autoimmunity (Brandão et al., 2016).

Lesions can also occur in the nasopharyngeal, genital, oral, conjunctiva, and tracheobronchial mucous membranes, often-causing hoarseness, dysphagia, and coughing.

Initial clinical manifestations can occur throughout the oral cavity with the appearance of purulent or bloody blisters that rupture and cause pain and fluid loss, and these results in electrolytic imbalance (Lakdawala et al., 2013).

These occurrences have a direct impact on the individual's nutritional status. Advanced lesions in the oral cavity can interfere with food intake, as they cause pain and burning. Thus, nutritional intervention must start early to mitigate adverse effects and thus contribute to the healing process and body depletion control (Porro et al., 2019).

Concerning assistance, the great precariousness of professionals, especially nurses, specialized in the area of dermatology in the health services, which consequently results in the lack of direction of the nursing team to promote qualified care to people with pemphigus (Brandão et al., 2016).

The mental health care of patients with pemphigus during hospitalization is also relevant since the symptoms, treatment, and prognostic characteristics can induce significant psychological damage, including suicide (Tabolli et al., 2014). In this context, the psychologist's action is essential considering that the skin is an organ susceptible to emotional aspects, that's configure as triggers, maintainers or aggravators of clinical conditions, contributing negatively to a biopsychosocial approach to the treatment of these patients (Ludwig et al., 2008).

Due to the rarity of these diseases, patients may take months before being diagnosed with pemphigus, because it is initially causes lesions with similar non-specific clinical aspects, some infections, and other autoimmune diseases. Besides, the differential diagnosis is extremely relevant and should include investigation for bullous pemphigus, drug-induced pemphigus, erythema multiforme, familial benign pemphigus (Hailey-Hailey's disease), pemphigus caused by Immunoglobulin A (IgA), linear IgA bullous dermatosis, paraneoplastic pemphigus, erythematous pemphigus, pemphigus foliaceus, pemphigus herpetiformis (Fonseca et al., 2017).

There are two clinical scores, the pemphigus area and disease index (PDAI) and the severity index (ABSIS), which are currently being used as clinical outcome parameters and in clinical trials to assess the extent and activity of pemphigus. Currently, there are no agreed cutoff values to define mild, moderate, or severe disease (Dedee et al., 2020).

For personalized service, there must be a humanized and comprehensive assistance, as recommended by the Brazilian Unified Health System (SUS), it is necessary to be attentive to the individual needs of each patient, administering the prescribed medications, carrying out the specific care and always highlighting the importance of self-care (Martins & Luzio, 2017). The

multi-professional team must be aware of the severity of the pathology, the consequences of inadequate care, and the need to use clear and specific communication (Brandão et al., 2016; Oliveira et al., 2016; Motta et al., 2020).

Thus, in order to care for these patients integrally, professionals from different areas of knowledge act must meet the different technical challenges of the disease. Because of the above, this work aims to describe a case report of pemphigus vulgaris, as well as the multi-professional approach to the disease.

2. Methods

This is an observational, descriptive, qualitative study of a case report of a patient seen in a reference hospital for pemphigus in Goiânia in 2019. The interest in the case occurred during a multi-professional clinical visit of residents of a multi-professional residency program in infectious disease. The discussion prompted the description of the pathology with a view to assistance by various pieces of knowledge.

Data collection from patient records occurred from September 2019 to January 2020, according to the scientific research elaboration manual proposed by Pereira et al. (2018). Information contained in the medical chart, such as identification, primary complaint, family history, personal history, physical examination, psychological assessments, the study of medications, study of identified diseases, the survey of problems, diagnosis, and results of laboratory tests were obtained. In compliance with the ethical precepts, the patient was informed and invited to participate in the study employing an Informed Consent Term (TCLE). The Ethics Research Committee (CEP) approved the study in the proposing institution under CAAE nº 18311419.7.0000.0034, with the date of approval on 04-09-2019.

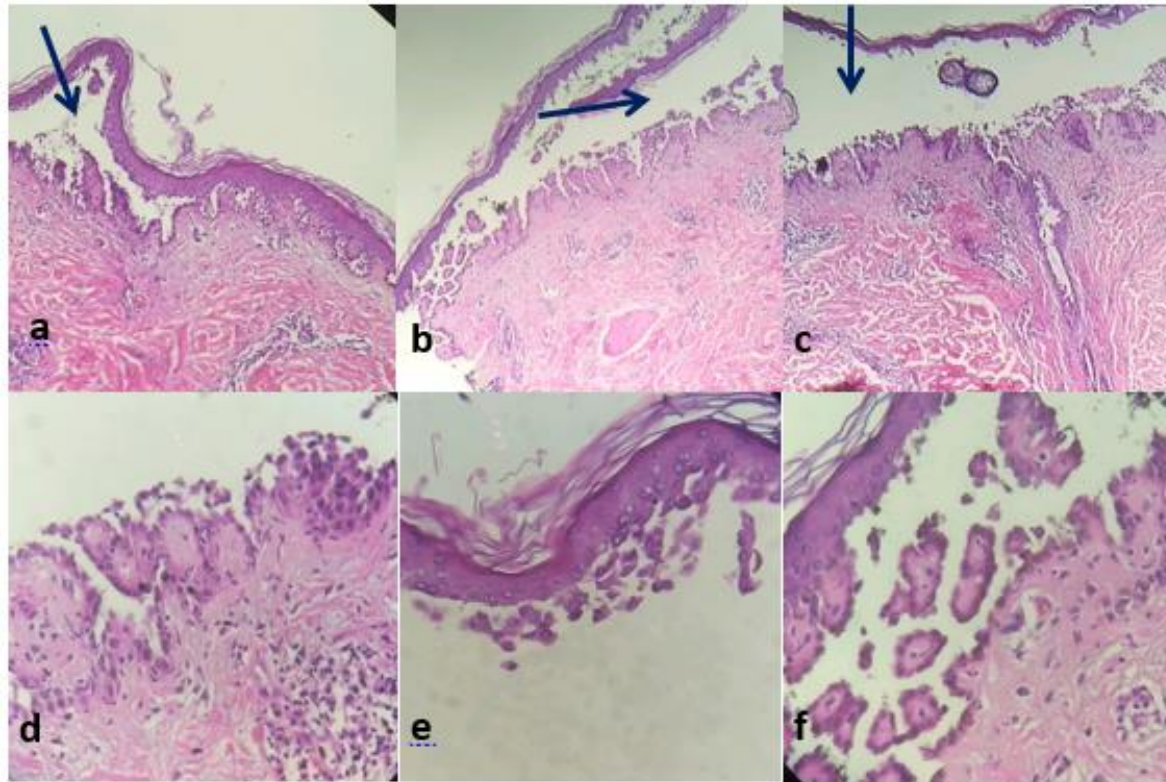
3. Case Report

Male patient, 41-years-old, coming from the metropolitan region of Goiania, convicted, without comorbidities. He arrived at the hospital emergency room with diffuse crust lesions with itching associated throughout the body approximately two months. He was afebrile, with inappetence, collaborative, wandering, with depressed mood, high reactive anxiety, referring insomnia, burning in lesions and cold.

Laboratory investigations excluded the hypotheses of systemic lupus erythematosus (SLE), scleroderma, syphilis, leprosy, tegumental leishmaniasis, and the primary

mucocutaneous mycoses. Histological examination demonstrated the presence of a suprabasal intraepidermal bulla, with the presence of acantholytic cells internal to the bulla (Figure 1). The case was treated as pemphigus vulgaris.

Figure 1: Histopathology examination of the patient's skin fragment. Source: Own authorship.



Source: Authors.

In the Figure 1 is possible to observe in images a, b, and c linear acantholytic separation between cells along with the lower epidermal layer (arrows), basal keratinocytes separated from each other and attached to the basal membrane and underlying dermis (d and e), considerable growth of basal epidermal cords, forming villi on dermal papillae (f). These clinical findings confirming the diagnosis of pemphigus vulgaris.

For the treatment of pemphigus, pulse therapy with methyl prednisone was performed, but no improvement was observed. Then, the multi-professional team discussed the use of immunoglobulin associated with methyl prednisone. Immunoglobulin was used late due to the difficulty in obtaining this medication from public organization, and because of the nephrotoxic potential of the antibiotic therapy administered in conjunction with this treatment, being initiated 60 days after hospitalization. Eight vials/day of human immunoglobulin were administered for three days. During hospitalization, the patient presented infections with

Klebsiella pneumoniae ESBL and *Pseudomonas aeruginosa*, both sensitive to carbapenems, and because of these findings were placed in contact precaution.

The patient made use of broad-spectrum antibiotics combined with specific antibiotics resulting from microorganisms identified in laboratory tests, respecting the maximum treatment time for each antibiotic therapy. Thus, during the 77 days of hospitalization, the following were administered: fluconazole, amoxicillin + potassium clavulanate, sodium oxacillin, cefepime hydrochloride, meropenem, vancomycin, amikacin, polymyxin B, fluconazole, levofloxacin, linezolid, and anidulafungin.

The treatment also included medications for anxiety control and sleep quality, pain management and gastric ulcer prophylaxis with amitriptyline hydrochloride, tramadol hydrochloride, paracetamol + codeine phosphate and omeprazole. Lidocaine spray was applied to the lesions. Besides, he used healing gel (Saf-Gel®), calcium alginate plate on the neck crusts, face and antecubital region, 2x daily bath with potassium permanganate, and application of Dersani® for dermoprotection. Finally, butter paper was placed in the patient's bed to minimize the detachment of the epidermis in contact with the sheet.

The patient in question presented variability concerning nutritional aspects during his hospitalization. Initially, he presented with inappetence, dysphagia, and odynophagia due to wounds in the oral cavity, which made it impossible to eat. Even presenting such conditions, he did not present severe dysfunctions that would compromise the oral intake. During his hospitalization, he was offered a mild or pasty, hyper-caloric, hyper-protein, and normoglycemic diet. Also, a nutritional supplement was offered 3x a day.

As psychological support, empathetic listening, support for reducing anxiety, facilitating the expression of feelings and their validation, as well as strengthening strategies to cope with the disease were initiated with the patient.

Finally, at 78 days of hospital stay, during the early morning, the intensive care physician of the ICU was called to re-evaluate the patient who was in cardiac arrest. Thirty minutes later, he presented with the absence of pulses, heart sounds, mydriatic pupils, and no photoreaction, and death was verified.

4. Discussion

Pemphigus vulgaris is a rare autoimmune skin disease with a worldwide incidence of 0.75 to 5 cases per million inhabitants/year, with variations depending on the population studied. It has been estimated at 0.8 in Finland, 4.2 in the United States of America, 6.0 in Italy,

8.0 in Greece, and in Israel 16.1 cases/million inhabitants/year. There is no predominance of sex, racial, or ethnic group. This disease affects mainly adults, with a peak incidence between the fourth and sixth decades of life (Kridin et al., 2017), given that the patient in the present study agreed with the age of 41 years.

In Brazil, there are no complete national data on the incidence of the disease. However, in the analysis of the medical records of the autoimmune diseases outpatient clinic of the Ribeirão Preto Medical School - University of São Paulo (FMRP-USP), in a historical series of 21 years (1988 to 2008), the authors found the occurrence of 266 cases of pemphigus. For the 103 cases of pemphigus vulgaris, the mean age was 41.49 years (8 to 75 years), and the median was 42 years. In this study, the incidence of pemphigus vulgaris jumped from approximately 2.0 cases/million inhabitants/year in 1988 to 8.0 in 2008 (Gonçalves et al., 2011).

Mortality data indicate that before the introduction of corticotherapy in the 1950s, the average rate for pemphigus vulgaris was equivalent to 75%. This number was probably underestimated due to a lack of clear diagnostic criteria. The use of corticosteroids has since reduced mortality dramatically to an average of 30%. Mortality continued to decline rapidly in the 1960s and 1970s, reaching a level of 5.9% since the introduction of adjuvant therapies such as immunoglobulin therapy. Nevertheless, pemphigus still figures among the causes of morbidity due to functional disabilities and the aesthetic deformities it causes. Its mortality is related to secondary infections and to treatment that presents a high degree of complexity (Beltran et al., 2016).

An important study included 245 newly diagnosed patients with pemphigus between January 1990 and June 2016, where 48 deaths were observed during a mean follow-up period of 10.9 ± 8.1 years. Overall mortality among pemphigus patients was 2.4 times higher than in the general population, mainly due to infections (Kridin et al., 2017).

In the case-patient, the occurrence of secondary skin infection by bacteria of the genus *Pseudomonas* spp. and *Klebsiella* spp. that may have contributed to the unfavorable clinical outcome of the present case. In a study conducted in Israel, infectious diseases were the most commonly certified cause of death in patients with pemphigus vulgaris with 39.6% (n = 19), mainly pneumonia 18.8% (n = 9), skin infections 8.3% (n = 4) and septicemia 6.3% (n = 3). Other causes of death were malignancy 20.8% (n = 10), cardiovascular diseases 12.5% (n = 6) and cerebrovascular diseases 6.3% (n = 3) were found in 245 patients with pemphigus (Kridin et al., 2017).

At the site of the lesion, fibroblasts are inhibited by the action of microorganisms, some species have enzymes that hydrolyze the collagen, and consume essential oxygen and nutrients

in the reconstruction of tissues in the healing process. In addition, the presence of microorganisms in the lesions induces the body to secrete cytokines that initiate an inflammatory process that will also impair the recovery of the dermis (Pessanha et al., 2015).

These infections occur because the hospital environment provides a variable number of risk factors for patients with severe skin lesions, since the mechanical barrier offered by the epidermis has been destroyed (Oliveira et al., 2016; Porro et al., 2019). Regarding these infections, the use of antimicrobials is always necessary for patients with pemphigus vulgaris, as complications related to the infection of the lesions may contribute to the death of hospitalized patients.

The literature has shown that these microorganisms found in the patient, together with bacteria of *E. coli*, *Acinetobacter baumannii*, and *Enterobacter* spp., are the most prevalent in the hospital sites (Pessanha et al., 2015). They originate from water, bed grid surfaces, bed sheets, the patient's mattress, and spread through direct personal contact with the healthcare professionals handling the patient (Porro et al., 2019). These infections, according to the European Centre for Disease Prevention and Control (2016), can be reduced by 20 to 30% with intensive hygienic actions and control.

For the diagnosis, in the early stage of disease development, histopathological examination shows areas of eosinophilic spongiosis or just spongiosis in the basal epidermis, even before the formation of acantholysis. The acantholysis separation first forms a linear cleavage between the cells along with the lower epidermal layer, and then the bubble predominantly in the suprabasal area. This acantholysis may extend as cracks into the dermal adnexal structures or, occasionally, climb into the upper layers of the thorny epithelial portion. The basal keratinocytes, although separated from each other, remain firmly attached to the basal membrane and underlying dermis. In the dermis, there is a mild perivascular superficial inflammatory infiltrate, with edema and eosinophils. At a later stage, a considerable growth of the basal epidermal cords occurs, forming villi over dermal papillae (Fonseca et al., 2017). These findings in the histopathological examination confirmed the diagnosis of pemphigus vulgaris in the present study.

The pemphigus diagnosis also includes other methodologies such as direct immunofluorescence microscopy (DIF) of the perilesional skin, serological detection of serum autoantibodies against the epithelial cell surface by indirect immunofluorescence microscopy (IIF) and the immunoenzyme assay (ELISA) (Harman et al., 2017). Commercial ELISA assays are available for direct measurement of desmoglein-1 and desmoglein-3 antibodies in serum. These molecules play an essential role in cell adhesion, and in the case of pemphigus, they are

usually elevated in this pathology. This clinical trial allows the differential diagnosis between pemphigus vulgaris and bellows since the presence of antibodies against desmoglein-3 rarely occurs in a patient with pemphigus bellows (Fonseca et al., 2017).

It is important to emphasize that pemphigus remission is slow and variable for each patient, in the same way, the mortality rate decreases if the diagnosis is early (Leite et al., 2015). In the present case, it is believed that one of the facts that may have contributed to the unfavorable outcome was the arrival in service with more than two months of symptoms.

The common pemphigus can cause severe blisters on the skin and mucous membranes lining the mouth, nose, throat, eyes, and genital area. The blisters develop on the top layer of the skin and have a thin and fragile outer surface that breaks easily, leaving exposed areas (erosions) that can be extensive and painful (Harman et al., 2017). In the case exposed, the patient presented erythematous lesions with milicric crusts in several regions of the body, in which potassium permanganate, hydration with essential fatty acids, healing gel, and collagen, was used for bathing. The combination of these actives considerably improves the lesions, whereas a poor performance of these cares can further aggravate the condition (Oliveira et al., 2016).

Wound cleaning is aimed at removing debris, i.e., fragments of devitalized tissue or foreign matter, excess exudate, residues of topical agents and microorganisms in the wound bed, and preserving granulation tissue. Chlorhexidine 4% compared to polyvinyl-pyrrolidone 10% has a lower cytotoxic effect, but its prolonged use can select Gram-negative microorganisms in the skin and delay the healing process. The calcium alginate coating contains natural salts of alginic acid, extracted from brown seaweeds. It can take the form of plaque, cords, and various sizes and is indicated for wound treatment. Calcium alginate helps in the healing process due to its hemostatic action; it is made of a biodegradable material, non-toxic and hypoallergenic, and can be used in most lesions (Borges, 2005).

In these situations, the nursing team is responsible for carrying out care focused on the integrity and conservation and recovery of the skin. Professionals also must be attentive to all who access areas where such patients are, such as professionals and visitors, and should always guide them on the precautions and care needed to intervene in these patients (Brandão et al., 2016; Oliveira et al., 2016).

The literature describes that pemphigus treatment is initiated with corticosteroids, and these may or may not be associated with immunosuppressive medications and immunoglobulins. Corticosteroid administration predicts improved lesions in about 2 to 3

weeks (Schmidt et al., 2020). However, the patient in this study showed no clinical improvement.

In a clinical study, the efficacy and safety of pemphigus treatments were evaluated. The study followed 72 patients with different forms of the disease. Forty patients were treated with prednisolone, 15 with a combination of prednisolone plus azathioprine, and 17 patients with betamethasone and cyclophosphamide pulse therapy. They concluded that the frequency of relapses and the incidence of complications were higher in patients treated only with corticosteroids [$p < 0.05$]. Seventy percent of patients treated with pulse therapy required additional corticosteroids, indicating failure of pulse therapy as the only therapy. It was concluded that treatment with azathioprine-corticosteroid pemphigus was more effective and comparatively safer than the others (Akhtar & Hasan, 1998).

As for pulse therapy, it did not prove useful for the study patient. Mentink et al. (2006) evaluated pulsed dexamethasone therapy (300 mg over three days, monthly) combined with conventional prednisolone and azathioprine therapy, versus conventional therapy alone in 20 participants. The follow-up period was one year. Results included remission, death, and relapse. They demonstrated that the effect of pulsed dexamethasone therapy was inconclusive, and patients in this group had more adverse effects than other groups. The main limitation of this study was the lack of patients with refractory disease, for whom adjuvant therapy is probably more beneficial.

Regarding the use of intravenous immunoglobulin (IGIV), consists of natural polyclonal antibodies derived from the plasma of healthy people. Its use was evaluated in 21 patients with vesiculobullous diseases in which 14 corresponded to patients with pemphigus diagnosed between one and ten years and ages between 19 and 73 years. The dose of IVIG administered in each treatment was calculated in 2g/kg, and for patients with pemphigus, this dose was administered in a cycle of 4 weeks. At the end of the study, the authors observed that the patients went into remission. In three (21.4%) of the pemphigus cases that received IVIG, the treatment was interrupted due to significant remission. However, in one case, treatment was interrupted due to the development of embolism as a side effect of immunoglobulin use (Nazik et al., 2018).

Finally, it is also worth mentioning that difficulties were encountered in starting immunoglobulin therapy, one of the reasons being the bureaucracy about obtaining the medication. This is because it is a high-cost drug, as immunoglobulins require authorization from the public agency. The patient being institutionalized, and having a fragile family support network, has problems in obtaining the necessary documents.

For nutritional care, during his hospitalization, a diet was offered in soft or pasty consistency, aiming at better food acceptance and improved recovery in nutritional status. Additionally, a nutritional supplement containing arginine, glutamine, fatty acids, and nucleotides was offered as a complementary nutritional strategy in the outlined conduct. Immunomodulatory diets containing arginine and glutamine improve the individual's nutritional status, with a significant reduction in morbidity and length of hospital stay. In this sense, nutritional therapy aims to minimize the deterioration of the patient, prevent the occurrence of infection, accelerate healing, and collaborate with the reduction of interventions (Lakdawala et al., 2013).

One of the factors that interfere with healing is the nutritional condition of the wound carrier. The protein deficiency, which undoubtedly impairs healing, has a mechanism of action as investigated as unknown. In humans, the assessment of the degree of protein deficiency should not be based exclusively on the concentration of serum albumin but should be associated with total and fractionated proteins and serum transferrin. The decreased values require a dietary orientation directed to the increase of protein intake in addition to continuous monitoring. Another vitamin that interferes with healing is B6. Its deficiency leads to decreased protein synthesis and, perhaps, the strength of collagen fibers (Borges, 2005). The roles of vitamins A, E, K, B1, B2 in the healing process were also highlighted in the literature (Mendes et al., 2017).

Regarding the demands of psychology, the patient presented a variety of complaints throughout his hospitalization. Starting with the diagnostic investigation situation, which made him anxious and afraid of the lesions being irreversible or leaving sequels. He also observed impairment in his self-image, given the comprehensive coverage of the lesions. Such difficulties are reported as common effects of dermatopathies (Ludgwig et al., 2008).

Other complaints included the discomfort and pain in the lesions, which ended up making walking and swallowing difficult, besides the feeling of repulsion of the blood and secretions in the bed, impairing their sleep and feeding. As the investigation and conclusion of the diagnosis passed, he was able to understand his situation better but remained afraid of not recovering or having his plans threatened by the disease.

Psychology, in this specific case, sought to improve the patient's self-image and emotional well-being, reduce catastrophism and unreal fears, and promote better adaptation to treatment and greater enlightenment and autonomy as co-responsible for their health, because by assessing and treating their psychological problems, their state of health can be improved (Mazzotti et al., 2011).

The study by Tabolli et al. (2014) compared the psychological suffering of patients with pemphigus with lesions and without lesions and concluded that although the suffering tends to be higher in an acute phase. The pemphigus causes shakes in the quality of life of patients even in periods when no lesions are present, which points to the importance of psychological follow-up both during hospitalization and after discharge, because this pathology rarely has a complete resolution, and periods of remission and exacerbation may occur, the psychological assistance should be continuous.

It is important to emphasize that although the three main objectives of the treatment of the patient with pemphigus vulgaris are to suppress the immune response, inhibit the inflammatory response and take care of the lesions, other aspects no less important involve biopsychosocial assistance, health education, nutritional rehabilitation, prevention of physical disabilities and aesthetic deformities.

In this context, the residency programs provide not only professional training but also a wide range of services to the population that are benefited by various areas of knowledge. In many programs, residents represent up to 30% of the clinical team of health units. In the present case, the patient, in addition to medical care, benefited from the assistance of biomedical science, nursing, pharmacy, nutrition, and psychology professionals of the multi-professional residency program of infectious disease in the state of Goiás. In a similar study of a patient with vegetating pemphigus, the assistance included only nursing, physiotherapy and psychology professionals (Motta et al., 2020).

To the detriment of the patient's unfavorable outcome in the case, and in view of the information presented above, we believe that comprehensive patient care with coverage from several professionals brings direct benefits to patients. The link between patient and team provides important improvements in the quality of life of patients, improvement of physical and psychological aspects, and adequate adherence to treatment.

5. Considerations and Suggestions

It is concluded that early diagnosis and the start of rapid treatment delay the evolution of the disease, improving the appearance of the lesions, which reduces the length of stay, the risk of infection, the impact on emotional aspects, and higher patient compliance. Therefore, the performance of the multi-professional team contributes to the resolution of challenges related to the disease, such as improvement in the physical, emotional, nutritional, and safety aspects of the patient.

In this sense, we emphasize that each professional was indispensable in the search for solving the challenges of the case and sharing different knowledge. Nursing and nutrition sought technological solutions for prompt wound healing, pain relief, and preservation of digestive pathways, of which we can highlight as interventions the use of calcium alginate and immunomodulators. Psychology sought to alleviate the psychological suffering resulting from the damage to self-image, anxiety, and adherence to the proposed treatments. The clinical pathology followed the exams that confirmed the disease, the early identification of secondary infections, and the execution of health education actions with the patient and team. Finally, the pharmacy acted seeking to know all the drug interactions of the case, monitoring the correct administration of antimicrobials, and patient safety.

Among the limitations of the study, the unfavorable clinical outcome that did not allow new interventions that could contribute to the scientific community stands out. The absence of specific therapeutic clinical protocols for this pathology, being used in the present case protocols for burnt patients or with other dermatopathies. Also, the scarcity of data in the scientific literature on the subject. We also did not count on the participation of a physiotherapist in the study, despite having provided assistance to the patient.

As suggestions, we emphasize the importance of team training for early identification, intending to delay the evolution of the disease, and offer a better quality of life to patients. It is also essential that the team establish a close connection with patients, caregivers, and other team professionals to efficient communication and to share knowledge. Since the infections in the present case may have contributed to the unfavorable clinical outcome, we also highlight infection prevention and control measures, such as hygiene of the hands by all professionals, use of personal protective equipment in on patient management and adequate hygiene of the environment for prompt patient recovery and infection prevention.

To this finality, the Brazilian Ministry of Health instituted the national program for the prevention and control of healthcare-related infections as a tool for directing professionals. The document produced guides for carrying out various actions, such as surveillance and monitoring of microbial resistance, early identification, patient management flows, standards for biosafety of professionals and patients, guidelines for collection and referral of samples to the Central Public Health Laboratories (LACEN).

This study points out that multi-professional care for patients with pemphigus is a topic little explored in the scientific literature, there are no complete data on the incidence of this disease in Brazil, nor specific therapeutic protocols. This suggests the need for new scientific studies, publication of other reports with expanded coverage of professionals, new studies of

interventions for testing conventional and innovative drugs, and new experiments that support the development of specific therapeutic guidelines.

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