

DIFFICULTY IN THE DIAGNOSIS OF HERPES ZOSTER - A CASE REPORT

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ABSTRACT

Herpes Zoster, commonly known as "copper tree", is a disease of viral etiology, defined by the reactivation of the varicella zoster virus (VZV) latent in the sensory ganglia, which presents with radicular pain accompanied by vesicular exanthema, erythema and edema, symptoms that are characterized by agreement stages of the disease. Decreased immunity causes viral reactivation and can be triggered by metabolic changes, surgical or dental procedures, and situations of stress or immunosuppression. It is an acute infection, which can be transmitted through contact with infected individuals, with more severe complications in immunocompromised adults more severely. In the present report, we describe a case of Herpes Zoster with late diagnosis in a female patient, 47 years old, hypertensive, compensated for the use of antihypertensive medication and with all the characteristics of the disease described in the literature. Physical examination of the patient showed acanthosis and anicterus with severe pain on the right face, vesicle lesions with presence of exudate, edema and erythema that did not exceed the midline. Tramadol was administered intravenously and after establishing treatment with antiviral and opioid, it took several days to evolve the clinical picture. Herpes Zoster is a mainly clinical diagnosis disease that can be performed with the patient's history and physical examination without presenting major complications.

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INTRODUCTION

Herpes Zoster is caused by the reactivation of the Varicella Zoster virus (VZV). In Brazil, the incidence of Herpes Zoster is high. A third of the population throughout the lifetime will develop the disease, this is due to the fact that 90% of Brazilian adults are carriers of the Varicella Zoster virus. Studies show that seropositivity grows up to 10 years of age and remains stable in 90% from that age. Approximately 30% of individuals who have had chickenpox will develop Herpes Zoster at any given time in life. This risk increases with age. People over 50 and immunocompromised are the most at risk groups.

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The cases of HZ recurrence are around 5%, being more common in people with deficient cellular immunity (GOLDMAN, 2014). The pathophysiology of the disease occurs after the stage of hematogenous dissemination, where it reaches the skin, the virus moves through the center of the peripheral nerves to the nerve ganglia, where you can remain asleep for life. After this contact, the virus awaits factors that trigger its reactivation, such as immunocompromised patients, patients with chronic diseases, aging, stress, neoplasias, AIDS, among other pathologies (PASTERNAK, 2013). The virus is reactivated from a ganglion, where it travels along the axon and replicates in epithelial cells, causing Herpes Zoster in the dermatomes (GILDEN et al., 2009). The clinical picture of Herpes Zoster is characterized in the initial phase by typical symptoms of virose and includes burning in one of the dermatomes with increased sensitivity in the affected area,

being prevalent a lancinating pain that lasts around four days (Portella *et al.*, 2012). In the acute phase it is characterized by several groups of vesicles on an erythematous and edematous basis located unilaterally, usually on the side of the ganglion in which the virus has traveled to form the eruptions (PORTELLA; SOUZA; GOMES, 2013). There is a prevalence in the thoracic region in 53% of cases, cervical 20%, trigeminal 15% and lumbosacral 11%. (Brasil, 2010). Diagnosis of Herpes Zoster is mostly done clinically, mainly in immunocompromised people. The diagnosis should be combined with a good anamnesis and the classic manifestations such as pain, rash and its distribution in dermatomes (Coelho *ET AL.*, 2014). For cases requiring definitive confirmation of HZ the most sensitive and specific test is the Polymerase Chain Reaction (PCR) for VZV, made from vesicular fluid, blood or cerebrospinal fluid. (Goldman, 2014). Other diseases may be mistaken for Herpes Zoster. Herpes simplex (HSV), contact dermatitis, burns and vesicular lesions associated with fungal infections (Schmader, 2016). Contact with venomous animals such as spiders can be confused with herpes zoster because of the similarity of the signs and symptoms presented: pain with "cigarette burn" sensation, pruritus, tingling, erythema and edema (CUPO *et al.*, 2003).

The lack of early diagnosis favors the chronicity of the disease bringing complications such as post-herpetic neuralgia, which presents a severe pain for approximately one year after the disappearance of the rash, and the patient may present with allodynia, paraesthesia, dysesthesia or severe neuropathic pain. (Serrano, 2014). Among other complications of herpes zoster, we can highlight: ocular disease; facial paralysis; Ramsay Hunt syndrome; motor neuropathy and meningitis, and stroke (stroke) caused by inflammation of the cerebral arteries is more severe. (Freitas, 2007). With age being the most relevant factor in the development of herpes zoster, the increase in life expectancy of the population poses great challenges with regard to prevention and care of the elderly. Stress, considered to be the worst of the century and involving more and more individuals at different ages, is another important factor that can re-activate the Varicella-zoster virus. Thus, it is considered necessary to know about the disease, in order to recognize early signs and symptoms so that treatment is initiated in the first 48-72 hours, thus avoiding possible complications of the disease. Knowing to make the correct diagnosis through the history of the patient allied by a careful anamnesis, is a challenge for the current scenario of public health. Therefore, the present report aims to describe a case of Herpes Zoster with late diagnosis.

CASE REPORT

ECS, female, 48 years old, resident and natural of Quixadá - CE, compensated hypertension, sought medical attention with a major complaint of allergy probably caused by contact with spider. Three days ago the patient began to present a sharp pang on the right cheek, between the nose and the eye, where the spectacles fit, followed by lethargy, fatigue, like the symptoms of a virus. The next day, in addition to these symptoms, he noticed a small bubble ejecting a transudate fluid. When consulting a physician, it prescribed mucopolysaccharide polysulfate (Hirudoid) topical ointment twice daily. Without an improvement in the condition and an increase in pain intensity and spread of the blisters to other parts of the face, he sought medical attention again, this time

he was prescribed the anti-inflammatory Ibuprofen 600mg, take one tablet twice a day and one combination of Gramicidin, Neomycin Sulfate and Nystatin (Mud) ointment for topical use, apply twice daily to the blisters. After three days of the last service, the blisters already occupied all the right side of the patient, at night in clear due to the pain, they made her look for attendance at the UPA-Basic Health Unit. At the second patient admission the doctor who answered her looked at her face from a distance, she made a brief report about the possibility of having had contact with a spider, the doctor then authorized the administration of an injectable corticoid and dipyrone for pain. The patient returned home and maintained the use of medications previously prescribed. After the effect of the medications administered the previous day, the pains returned intensely, with flushing and edema appearing towards the right eye. In an attempt to minimize the pain, the patient made an ice cream compress, which increased the burning sensation, reporting the sensation of being "stabbed in the face". At dawn he returned to UPA and the attending physician prescribed Ceftriaxone 500mg (Rocefin) injected one ampoule a day for three days.

Without improvement, the patient sought care with a dermatologist at the Maternidade Jesus Maria José Hospital. Physical examination presented severe pain on the right face, speech difficulties due to edema, acyanotic, anicteric, temperature 37.5°C, weighing 59 Kg, hydrated, face region had multiple vesicobolous lesions with elimination of exudate, lesions with the same characteristics presented in the ear, part of the scalp and mouth, not exceeding the midline. Immediately the doctor started the antiviral treatment with acyclovir, oral and topical use. Due to the severe pain the doctor also opted for a drug of the class of opioids, Tramadol 100mg injectable for immediate administration and Tramadol 50mg tablets take one tablet twice daily if severe pain. The patient also made two return visits at the request of the physician to follow up the regression of the disease as well as the lesions. The regression time of the lesions and pains took about 45 days, so that the patient returned to normal activities.

DISCUSSION

Varicella Zoster virus infection was first documented in ancient civilizations that presented as a vesicular eruption of unknown causes; its relation to chickenpox (chicken pox) was suggested in 1888. (PIVOVAR *et al.*, 2013). The main characteristic of this virus is the rapid growth in cell culture and the ability to remain latent in the cells of its hosts for a long period (Schuster, Buses, 2009). It manifests as vesicular rash on dermatomes, becomes erythematous, edemaciada and eroded, preceded by fever, lethargy and headache. (Dworkin *et al.*, 2007). According to Lobo and collaborators (2014), the diagnosis of Herpes Zoster is above all clinical, through the analysis of cutaneous manifestations. Also in her work, Freitas *et al.* (2014) reports that there is no greater difficulty in the diagnosis of herpes zoster and that this is associated with greater longevity of the population, autoimmune diseases, characteristics of the lesions and their location in dermatomes. Carrusca *et al.* (2016) present a case of HZO in a healthy 29-month-old child, without previous clinical varicella and negative IgM and IgGanti-VZV antibodies in the acute phase, and a clinical diagnosis was made through lesion characteristics. Treatment with systemic antivirals according to Rodriguez (2013) should be started within 48-72 hours after the appearance of the first lesions in order to accelerate healing

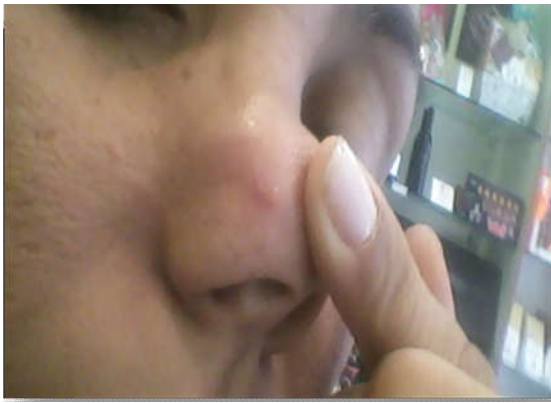


Figure 1. Primary lesions



Figure 2. Papulosus lesions with crusts



Figure 3. Vesicular and bullous lesions



Figure 4. Lesions with crusts



Figure 4. Crusty lesions and decrease of edema after initiation of treatment

between one and three days. Aciclovir 800mg five times a day for seven days or Famciclovir 500mg three times a day for seven days or Valaciclovir 1000mg three times a day for seven days, are the most widely used representatives. Regarding disease prevention, Pasternak (2013) talks about the vaccine that prevents Herpes Zoster. Because it is a disease of low mortality, in Brazil, the vaccine is not present in the vaccination calendar as routine. However, Herpes Zoster causes a reasonable index of morbidity, compromising the patients' quality of life. The age proposed to receive the vaccine is from 60 years, having at that age proven effectiveness. Another advantage of the vaccine would be to prevent recurrence of the disease and to people with underlying immune diseases. The case presented drew attention to the difficulty that health professionals had in diagnosing Herpes Zoster in a patient with a usual age for disease involvement, also due to the absence of physical examination and anamnesis. The characteristics of signs and symptoms such as: lancinating pain in the area that corresponds to the path of the affected nerve, which varies from 1 to 4 days accompanied most often by typical symptoms of virose presenting: fever, chills, headache, malaise happened by rash, are typical of Herpes Zoster. Skin lesions that begin with erythema evolving rapidly into vesicles and pustules, present in small unilateral groups that do not extend beyond the midline, are clinical manifestations abundant enough to represent what the literature describes.

Although no laboratory tests or complementary analysis of the signs and symptoms presented, the interviewee's age, emotional stress and emotional distress, and the literature description confirm all the characteristics for the diagnosis of Herpes Zoster. The failure of the various previous diagnoses allows us to conclude the difficulties to identify the pathology and how much health professionals need to spend more time to make a more attentive listening of their patients, it being clear how well performed physical examination and anamnesis is fundamental importance for the conduct of effective treatment without harmful consequences for society. It was found that there is a lack of preparation of the doctors who work in the primary care in the hospital, mainly because many do not have a medical residency, which in a way would better qualify the professional for clinical practice

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