SAS Journal of Medicine
Abbreviated Key Title: SAS J Med
ISSN 2454-5112
Journal homepage: https://saspublishers.com

OPEN ACCESS

Dermatology

Lethal Hemorrhagic Varicella in a 36 Years Old Immunocompetent Adult

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DOI: 10.36347/sasjm.2023.v09i04.014 | **Received:** 05.03.2023 | **Accepted:** 11.04.2023 | **Published:** 16.04.2023

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Abstract **Case Report**

Varicella represents the primary infection with the varicella zoster virus. It is most often seen in children. Severe forms are usually described in immunocompromised subjects. We report a hemorrhagic form in a 36-year-old immunocompetent adult who had been treated with systemic corticosteroid therapy. The diagnosis was late and the patient died with visceral failure.

Keywords: Varicella, Hemorrhagic, immunocompetent.

INTRODUCTION

Varicella is an infectious disease that represents the primary infection of varicella zoster virus. It is an immunizing [1], contagious disease common in childhood (1). It occurs in an epidemic mode. Approximately 60 million cases are recorded each year in the world. It is usually a benign disease, but complications, whether induced (iatrogenic) or related to a failure of the immune system, can be formidable.

Most cases are seen in childhood, with 50% of children contracting the infection before the age of 5 and 90% before the age of 12 [2]. It is considered rare in adults, however, where the condition is also much more severe (Ross).

We report a case complicated by hemorrhagic and neurological manifestations that occurred in an HIV-negative adult.

CASE REPORT

Mr. AC 36 years old, a mechanical technician residing in kéniéba, 400 kilometers from Bamako, consulted in May 2016 for a skin rash. It was an affection that would have started a week earlier by a diffuse pruritus accompanied by fever, the interrogation revealed that two of his children had presented a similar rash 10 days earlier.

He had first consulted a peripheral health facility where he received oral betamethasone, amoxicillin clavulanic acid, tramadol, desloratadine, erythromycin, then methylprednisolone and aspegic by injection.

On admission, the patient was prostrate, unable to move on his own, conscious, with a temperature of 39°C. He had vesicles on his face, and was in a state of shock. He presented with umbilicated vesicles in the center, confluent in places to the face forming bullae. These lesions were dotted with excoriations on a swollen background of the face, giving a puffy aspect making the eye opening perilous. Multiple erosions on the oral mucosa limited feeding. The language was painful. A paraparesis with abolition of osteo-tendinous reflexes made us evoke a syndrome of Guillain barré. The cytodiagnosis of tzanck found ballooning cells. The blood test showed hyperleukocytosis and elevated transaminases. HIV retroviral serology was negative.

The diagnosis of varicella was based on the clinic and the tzanck cytodiagnosis. We discontinued corticosteroid therapy and instituted antiviral treatment with acyclovir 4mg/kg/day. The next day, a hemorrhagic syndrome developed and the patient died within 24 hours.

Figure 1: Umbilicated vesicles on the face and trunk

Figure 2: Umbilicated vesicles on the arms

Figure 3: Vesicles on face, neck and trunk

Figure 4: Vesicles on face and trunk

DISCUSSION

We report a case of lethal complicated varicella in a 36-year-old immunocompetent adult. The diagnosis of varicella was based on clinical and anamnestic arguments. The severity of the condition in our case can be explained by a combination of factors. The chronology, it is the third person successively affected by the disease in the family. The authors consider that in case of intrafamilial contagion, secondary cases would be more severe than primary cases [3]. Adulthood is also often a serious risk factor [4].

The severity of varicella in our case may also be of iatrogenic origin, namely cortitherapies instituted from the first hours of the rash. Indeed, the immunosuppressive effect of oral betamethasone could have favored the severity of the viral infection. Cases of

lethal varicella have already been described in patients on systemic corticosteroids [5, 6]. Guillain-Barré syndrome (polyradiculoneuritis) has been suggested in the presence of paraparesis, abolition of osteotendinous reflexes, and may be induced by the viral infection or by captopril treatment [7]. This syndrome may induce respiratory difficulties that can be fatal for the patient.

A final hypothesis may be protein C deficiency or thrombophilia by mutation of factor V which favors the occurrence of purpuric lesions.

CONCLUSION

Varicella is a benign disease in immunocompetent individuals. However, iatrogenic factors can constitute elements of gravity and engage the vital prognosis.

Varicella in adults must be considered as a serious condition, and management must be early in the dermatological setting.

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