

## CASE REPORT

## A tale of two viruses

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A 30-year-old woman presented to Tshepong Hospital, Klerksdorp, South Africa, with a history of rash with papules and pustules, which started on her face and spread to her entire body. There was a typical varicella lesion on the trunk. She was newly diagnosed as HIV-positive and was not yet on antiretroviral therapy.

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A 30-year-old woman presented to Tshepong Hospital, Klerksdorp, South Africa, with a history of rash with papules and pustules, which started on her face and spread to her entire body. Fig. 1 depicts a typical varicella lesion on the trunk. She was newly diagnosed as HIV-positive, with a CD4 count of 232 cells/ $\mu$ L, and was not yet on antiretroviral therapy.

Examination showed that she was normotensive, but with a tachycardia of 138 beats per minute. She was afebrile, and



Fig. 1. Varicella lesion on the trunk.



Fig. 2. Varicella lesion on the hard palate.

had a tachypnoea of 28 breaths per minute, with 92% oxygen saturation on room air. Of note was a generalised varicella lesion involving the mucous membrane of the hard palate (Fig. 2).

The rest of the examination revealed nothing abnormal. Arterial blood gases showed a pH of 7.5,  $PCO_2$  of 28.2 mmHg,  $PO_2$  of 92.7 mmHg and saturation of 98% on room air. Her  $HCO_3^-$  was 23 mmol/L. A chest radiograph revealed diffuse bilateral nodular interstitial infiltrates. Fig. 3 depicts typical varicella pneumonia.

The diagnosis was that of disseminated varicella in a woman newly diagnosed with HIV. We started treatment for varicella with intravenous acyclovir and instituted other supportive measures. The patient was sent to the intensive care unit for overnight observation.

Varicella in an immunocompromised patient often presents as severe disease. A

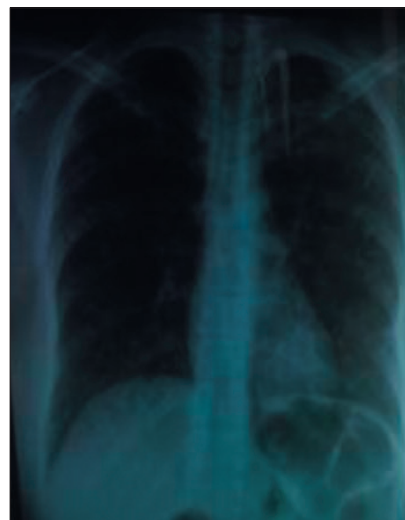


Fig. 3. Chest radiograph, depicting typical varicella pneumonia.

full blood count showed a white cell count of  $9 \times 10^9/L$ , haemoglobin of 14.7 g/dL, mean corpuscular volume of 78 fL, and platelet count of  $114 \times 10^9/L$ , with a normal differential count. Urea and electrolytes were unremarkable, as was a liver function test. Serum cryptococcal antigen and blood culture were negative. A skin biopsy was sent for culture and histopathological examination. Tissue culture was negative and the histopathology was in keeping with varicella zoster infection.

## Discussion

Disseminated zoster is associated with immunosuppression. In our setting, HIV is the most common association, although there are other causes for the immunosuppression. Dissemination of zoster in an immunocompromised patient may present mainly with cutaneous dissemination and visceral dissemination in the form of zoster pneumonitis, hepatitis and encephalitis.<sup>[1]</sup> The duration of the disease is generally longer in immunocompromised than immunocompetent patients.<sup>[1]</sup> The diagnosis is clinical. However, in our case a skin biopsy was taken to exclude cryptococcus and other opportunistic infections. Zoster in an immunocompromised patient does not follow a dermatomal pattern.<sup>[2]</sup> Other complications of varicella are myocarditis, corneal lesions, nephritis, arthritis, bleeding diatheses, acute glomerulonephritis and hepatitis. Acyclovir is still considered as a first-line agent. One should, however, note the potential for secondary bacterial infection and need for analgesia.

## References

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