Herpes virus infection and the Tzanck test

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A 65-year-old woman with chronic lymphoid leukemia presented with vesicles, pustules and scabs on her back, face, chest and abdomen (Figures 1 and 2), considered to be either acute generalized exanthematous pustulosis or varicella zoster, and treatment was begun with acyclovir and a PCR test for varicella zoster. Due to the delay in obtaining PCR results and the risk of exposure to acyclovir, a Tzanck test was requested, confirming herpes virus infection (Figure 3) attributed to varicella zoster. The acyclovir treatment was completed, and a positive varicella zoster PCR report was ultimately received.

The Tzanck test is a rapid, simple and inexpensive test for examining vesicular lesions and confirming herpes virus infection. It has the limitation of not differentiating between infections caused by herpes simplex virus 1, 2 or 3, but it has good operational performance (40-80% sensitivity and up to 100% specificity) when there is doubt regarding a diagnosis of herpes virus infection.

References

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Figures 1 and 2. Multiple erythematous vesicles, with some generally distributed pustules and scabs.



Figure 3. *Tzanck test: H-E 40X, epithelial cells with multinucleation and hazy nuclei with nuclear molding.*

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