GRANULOMATOUS REACTIONS FOLLOWING HERPES ZOSTER CONTAIN VARICELLA-ZOSTER GLYCOPROTEIN gpI

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Granulomatous reactions at the sites of herpes zoster (HZ) are rather common. Their etiology has never been elucidated and DNA of varicella-zoster virus (VZV) has not been disclosed by polymerase chain reaction. We explored the possible presence of other VZV antigens as the cause of HZ related granulomas. We developed a monoclonal mouse antibody (VL8), IgGl Kappa isotype, directed to the envelope glycoprotein gpl of the VZV. The VL8 ab is specific for VZV without cross reactivity with the other herpes viruses as asseessed by EIA and cytofluorimetric analysis. Biopsies of HZ (5), herpes simplex I and II (8) and appropriate controls (10) were formalin fixed and paraffin embedded. Immunostaining with ABC method was performed with VL8 ab and Herpes I and II ab (Dakopatts).

No cross reactivities were noted. VL8 ab 1abelled keratinocytes at the site of HZ vesicles and in some hair follicles. A positive immunostaining was also disclosed at the site of inflammatory reactions in the deep dermis as well as in neurovascular plexuses and perineural cells.

We conclude that the presence of viral envelope antigens in the deep dermis is likely responsible for the HZ related granulomatous reactions.