## Letter to the Editor

## A HERPESVIRUS FROM AN EUROPEAN SHREW (CROCIDURA RUSSULA)

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Viruses of the *Herpesviridae* family are widely distributed among the animal world, from fishes to the elephant (1). During field studies performed in April 1992 in a mixed focus of Eyach and Erve viruses in western France (2,3), we have unexpectedly isolated a herpesvirus from tissue of a freshly trapped white-toothed shrew, Crocidura russula. Isolation was done using suckling mice (SM) inoculated by ic route; SM died 7 to 11 days pi exhibiting neurological signs. The French isolate, Brest/An 711, was inactivated by ether, acidic pH and heating, and passed through a 200 nm filter. Complement-fixing or haemagglutination antigen was not obtained by sucrose-acetone extraction of infected SM brain. However, sections of infected brains examined by light microscopy showed the integrity of neurons and alterations limited to the meningeal envelopes with polymorphonuclear and round cells infiltration. Typical type A intranuclear inclusions were seen in the endothelial and perithelial cells of the meningeal vessels. The only other SM organ exhibiting lesions was the liver with small foci of hepatocyte necrosis and intranuclear inclusions. The hepatic architecture was preserved. Brest/An 711 virus readily adapted to vero cells inducing in 2-4 days large areas of cell degeneration with rounded cells, polykaryocytes and type A intranuclear inclusions. Using immunofluorescence assays and monoclonal antibodies we proved the isolate was

not herpes simplex virus type 1 or 2, varicella-zoster virus or human cytomegalovirus. Electron microscopy of infected vero cells showed typical herpesvirus particles located in the nucleus and in vicinity of the plasmic membrane of degenerated cells. The only known herpesvirus of insectivora has been described in Great Britain (4) from the European hedgehog (*Erinaceus europaeus*). However, it would be of interest to compare also our isolate to wild rodent herpesviruses, especially those previously isolated from *Apodemus flavicollis* and *Clethrionomys glareolus* in Slovakia (5,6) or from *Microtus pennsylvaticus* in USA (1).

## References

- 1. Herpesvirus Study Group, I.C.T.V., Arch. Virol. 123, 425, 1992.
- Chastel, C., Main, A.J., Couatarmanac'h, A., Le Lay, g., Knudson, D.L., Quillien, M.N., and Beaucournu, J.C., Arch. Virol. 82, 161, 1984.
- 3. Chastel, C., Main, A.J., Richard, P., Le Lay, G., Legrand-Quillien, M.C., and Beaucournu, J.C., *Acta virol.* 33, 270, 1989.
- Stack, M.J., Higgins, R.J., Challoner, D.J., and Gregory, M.W., Vet. Rec. 127, 620, 1990.
- Blaškovič, D., Stančeková, M., Svobodová, J., and Mistríková, J., Acta virol. 24, 468, 1980.
- Rajčáni, J., Blaškovič, D., Svobodová, J., Čiampor, F., and Hučková, D., Acta virol. 29, 51, 1985.