In vitro transcription of human pararotavirus

Jashes, M.

Sandino, A. M.

Faundez, G.

Avendaño, L. F.

Spencer, E.

Purified human pararotavirus obtained from stool samples from a 6-month-old infant was characterized. Electron microscopy of the viral particles subjected to different treatments suggested that the protein shells differed from those described for rotavirus. Treatment with both EDTA or ethylene glycol-bis(?-aminoethyl ether)-N,N,N',N'-tetraacetic acid in the presence or absence of Mg2+ seemed to convert the virions into core particles by removal of both the outer and inner shells, and no particles equivalent to single-shelled rotavirus were observed. Different procedures were used to activate the human pararotavirus-associated RNA-dependent RNA polymerase. The enzyme was not activated by chelating agents or by thermal shock as in rotavirus. Activation by thermal shock occurred only in the presence of the four ribonucleoside triphosphates and Mg2+. However, the polymerase of pararotavirus was found to be similar to those described for rotaviruses.