In June, 2010, two boys aged 14 years and 15 years were found to have diffuse maculopapular lesions associated with pustules and crusts (figure). They had been living in a settlement in the deep forest area of the southern Central African Republic (CAR). The cases were reported to the Institut Pasteur at Bangui. The lesions developed after the boys had hunted and eaten a wild rodent (hemba). They both presented to a health centre 1 week after eruption of the extensive lesions, which covered the face, torso, and limbs. Both boys were systemically well, with no fever or notable lymphadenopathy.

Infection with monkeypox virus was suspected. The differential diagnoses considered were staphylococcal skin infection, chickenpox, and cutaneous syphilis. Our patients were tested for syphilis; one had a positive result and received treatment with benzathine benzylpenicillin IM 2·4 MIU as single dose. Both were also treated with cloxacillin for a possible staphylococcal skin infection. Laboratory investigations were done on serum and scabs and on a biopsy sample from the brain of a young mouse that had been inoculated 5 days earlier with scab material from the lesions. Monkeypox virus was detected by quantitative PCR based on partial haemagglutinin gene sequences of the viral genome in both samples and to confirm the genotype. The phylogenetic tree (see webappendix) showed that the strain was identical to the 2001 strain circulating in central Africa. This reported strain showed any sequelae.

We were able to detect, in one step (48 h), two sequences of haemagglutinin and DNA polymerase DNA-dependent polymerase of the viral genome in both samples and to confirm the genotype (DRC clade). Our patients were admitted to the local health centre and kept in isolation until they were no longer infectious. When last seen a week after discharge, in June, 2010, both were well and neither showed any sequelae.

MPV has a wide range of hosts, so it can maintain a reservoir in wild animals while sporadically causing human disease, generally in remote villages in the rainforest areas of central and west Africa. Large outbreaks, with transmission between people, occur only in the DRC. The case-fatality rate in Africa is between 1% and 10%. There is no specific treatment or vaccine although smallpox vaccination is 85% effective in preventing monkeypox. In 2003, the first human monkeypox outbreak in the western hemisphere was reported in the USA after importation of rodents from Ghana. We describe the occurrence of two typical cases of monkeypox, caused by the same viral genotype, 10 years after the previous infections with this strain. Although monkeypox is rare, its differentiation from other similar presenting illnesses is important.

Case Report

Maculopapular lesions in the Central African Republic

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