
Global Update

Monkeypox

Monkeypox is a viral disease with a clinical presentation in humans similar to that seen in the past in smallpox patients. Smallpox no longer occurs, following its worldwide eradication in 1980, whereas monkeypox is still seen as a sporadic disease in parts of Africa.

The virus responsible for monkeypox is related to the virus that used to cause smallpox. Vaccination against smallpox (no longer done) protected against monkeypox. Before the eradication of smallpox, vaccination was widely practised and protected against both diseases. However, children born after 1980 have not been vaccinated against smallpox and are likely to be more susceptible to monkeypox than older members of the population. The death rate from monkeypox is highest in young children, reaching about 10%.

Most cases occur in remote villages of Central and West Africa close to tropical rainforests where there is frequent contact with infected animals. Monkeypox is usually transmitted to humans from squirrels and primates through contact with the animal's blood or through a bite.

Following reports of ongoing cases of human monkeypox in the 'Democratic Republic of Congo' (Zaire) representing a new pattern of the disease, the Ministry of Health in Zaire and the World Health Organization (WHO) organized an investigation in February 1997.

In the past in the 'Democratic Republic

of Congo' (Zaire), an outbreak of monkeypox would not go very far in the village or last long because it did not spread extensively after the first patients recovered. However, the present study indicates that monkeypox disease is changing its pattern of infection in humans. The outbreaks had a much higher rate of person-to-person transmission than seen before, and spread through many generations of transmission, thus maintaining the outbreak for more than a year.

Previous studies over a twenty year period had shown that the rate of transmission of monkeypox within households was low, suggesting that the disease had a low potential for transmission from person-to-person. Outbreaks were generally self-limiting after one or two sequential transmissions. However, the recent study has shown that:

- The outbreak in the 'Democratic Republic of Congo' (Zaire) presents the largest cluster of monkeypox cases ever reported;
- The proportion of patients who were 15 years of age or older (27%) was higher than previously reported (8%). Young children had been most affected in previous outbreaks;
- The rate of transmission from person-to-person (73%) was higher than previously reported (30%). This was associated with the clustering of cases in household compounds and prolonged chains of transmission from person-to-person;

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- The proportion of deaths (3%) was lower than previously reported (10%); all were aged under three years and died within three weeks of disease onset.

The ending of vaccination programmes against smallpox in the late 1970's has probably led to an increase in susceptibility to monkeypox and could explain the larger size of the most recent outbreak, the higher proportion of patients aged 15 and over, and the spread through many generations of transmission.

WHO is concerned that monkeypox could pose a public health problem in this region of the 'Democratic Republic of Congo' (Zaire) and therefore vigilance must be maintained by strengthening detection systems for monkeypox and completely investigating future outbreaks.

Further WHO studies are planned in the region to determine the need for additional risk-reduction measures.

In May 1996, the 49th World Health Assembly decided that the last remaining stock of smallpox virus held in two research centers in the Russian Federation and the United States of America should be destroyed as the last step in the complete and final global elimination of smallpox. It also decided that WHO would keep 500 000 doses of smallpox vaccine (which is also effective against monkeypox). The smallpox vaccine seed virus (vaccinia virus strain Lister Elstrea) will be maintained in the WHO Collaborating Center on Smallpox Vaccine at the National Institute of Public Health and Environmental Protection in Bilthoven, Netherlands, so that new stocks of vaccine can be produced if needed.

The World Health Assembly Adopts a Resolution on the Sale of Medical Products Through the Internet

The Fiftieth World Health Assembly has expressed its concern at the advertising, promotion and controlled sale of medical products by electronic communication. This phenomenon, which is developing rapidly, may present a hazard for the public health as well as a risk for the individual patient, particularly with regard to misleading or fraudulent product information and lack of individual counselling for consumers.

In the resolution they have adopted in this matter, delegates stress that the effectiveness, safety and quality of medical products must be carefully evaluated. In most Member States of the World Health Organization (WHO), such products require authorization prior to marketing, and are available only on medical prescription. They also maintain that proper and safe use of medical products calls for review of the medical history, medical examination, diagnosis of the condition and subsequent counselling and follow-up.

The delegates were particularly concerned that advertising, promotion and sale through the Internet might result in uncontrolled across-the-border trade of

Medical products or fraudulent imitations that may be unevaluated, unapproved, unsafe or ineffective, or used inappropriately. They asked the Director-General of WHO to collaborate with the drug regulatory authorities and national and international

enforcement agencies to see that the text was applied, and to work with consumer groups, professional associations, the pharmaceutical industry and other relevant parties, to collect all necessary information on the subject.
