Monkeypox outbreak in Nigeria

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Monkeypox, a disease akin to smallpox, yet with slightly milder symptoms, is emerging in humans in Africa at present. Since its discovery in 1970, most human monkeypox cases have been reported from the Democratic Republic of Congo (DRC) [1–5]. Cases have also been seen in the Republic of Congo [6] and Sudan [7]. In 2003, a virus originating among West African rodents imported to the USA caused a small outbreak there [2,8]. Over the past years, a substantial rise in the number of monkeypox cases has been documented in the DRC [3–5,8].

The virus has a reservoir in mammals and can spread zoonotically to humans through direct contact [1–5,8]. Human-to-human transmission is also possible and household transmission to susceptible individuals is common [3–5]. Monkeypox closely resembles smallpox; indeed, because of the kinship between these viruses, smallpox vaccination provides substantial cross-protection against monkeypox. The emergence of the disease appears to depend on several factors:

a) cessation of smallpox vaccination resulting in an increasing number of individuals susceptible to monkeypox;
b) waning immunity to monkeypox virus among those previously vaccinated against smallpox;
c) growing opportunity for human-to-human transmission; and
d) increased exposure to reservoir species as humans intrude the habitats of wildlife carrying the virus.

On 22 September 2017, the Nigerian Center for Disease Control (NCDC) gave a notification of a suspected outbreak of monkeypox. By 25 October 2017, a total of 94 suspected cases have been reported from 11 States and the Federal Capital Territory (FCT) [9]. At least nine cases have been confirmed by laboratory testing. Presumably the primary cases were zoonotic, yet secondary human-to-human transmission also seems to have occurred: in DRC, a transmission rate of 50% to household contacts has been reported [10].

Comment

While monkeypox is endemic in the Congo Basin of DRC, an outbreak in Nigeria and any new region would be likewise alarming, as the proportion of susceptible individuals in the population – including hunters of bush meat – is rapidly increasing everywhere, with time elapsing since the cessation of smallpox vaccinations. While there are no vaccines available, community-wide action and education should begin as soon as the first monkeypox case is identified in an area. NCDC has activated an Emergency Operation Centre (OEC) to coordinate the outbreak investigation and response across affected states [9] and samples have been collected from all suspected cases for laboratory testing. To contain the problem, NCDC has emphasized the importance of health care workers in adhering to general hygienic precautions, and the local inhabitants are being instructed to improve their hand hygiene and avoid bush meat [9]. International bodies are also alert to the problem: NCDC reports working with poxvirus experts from the World Health Organization and the U.S. Centers for Disease Control and Prevention.

References


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