Oropouche (ORO) virus, Bunyavirus genus of the family Bunyaviridae and one of at least 21 Simbu group viruses in the Bunyamwera supergroup, has been recognized as a major cause of human febrile illness in the Brazilian Amazon. Between 1961 and 1980, several outbreaks occurred in urban and rural centers of Pará state, in the eastern part of Amazon. It is estimated that at least, 165,000 persons were infected (figure 1).

From May 1980 to February 1981, the first outbreaks of ORO were recorded in Amazonas state (Barcelos and Manaus). Nearly 97,000 out of the 650,000 inhabitants of Manaus were infected. Based on serological studies, we were also able to detect, in 1980, an outbreak of ORO in Mazagão, a town in Amapá state. In 1988, other outbreaks were studied in Maranhão state (Porto Franco) and Tocantins state (Tocantinópolis) with thousands of persons infected.

During the first quarter of 1991 an extensive outbreak broke out in the villages of Ariquemes and Ouro Preto do Oeste, in the Rondonia state. A randomized survey carried out in Ariquemes by Health Secretary of Rondonia estimated in 58,874 cases of ORO infections. In December 1994, a new epidemic of human illness caused by ORO virus was recognized in the Serra Pelada gold mine (5°35’S, 49°30’W) in Southeast region of Pará state. Based on the serological data, we conclude that in this epidemic occurred 5,085 cases or a prevalence of 83 %. From the beginning of 1996, another epidemic caused by ORO virus has been occurring in Pará state (Vitória do Xingu, Brazil Novo and Oriximiná), Amazonas state (Novo Airão) and for the first time in Acre state (Xapuri). Numerous virus strains were isolated from blood of febrile patients and hundreds of recent infections were diagnosed by MAC ELISA (Figure 2).

One must be concerned about the spread of the ORO fever to urban and rural centers, infested with the biting midge Culicoides paraensis, that seems to play a major role in virus transmission. In fact, outbreaks have already been reported outside of the Amazon region, in Panama (1989) and in Peru (1991 - 1992).

REFERENCES


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Figure 1: OROPOUCHE outbreaks between 1961 and 1980.

Figure 2: OROPOUCHE outbreaks between 1980 and 1996.