

WHO recommends that the Partograph and its management protocol be used in all labor wards that have facilities for managing complications of labor. In health centers without such facilities, the

WHO Partograph can also be used to rapidly identify labors for which referral may be required. The impact of the use of the Partograph in these settings is being evaluated in other research sponsored by WHO.



Technical Advisory Meeting Held on Newly Identified HIV-1 Subtype O Viruses

An informal consultation of 22 international experts was held on 9–10 June 1994 at WHO Headquarters in Geneva to discuss the implications that a newly identified subtype of the human immunodeficiency virus (HIV) may have for diagnosis.

HIV is characterized by a high level of genetic diversity. Two HIV types have been defined: HIV-1, which is pandemic, and HIV-2, which is more geographically restricted. Through statistical and phylogenetic analyses of HIV-1 gene sequences, a typing framework for HIV diversity has been established in which the HIV-1 variants are grouped according to specific gene sequences into at least eight subtypes, termed A through H. Recently, divergent HIV-1 viruses have been identified; they cannot be classified as any of the previously known HIV-1 subtypes and are designated HIV-1 subtype O ("O" denotes genetic "outliers"). The available sequence data from HIV-1 subtype O viruses are limited at this time, but they suggest that diversity within the subtype O group may be as great as that

which exists among HIV-1 subtypes A through H.

To date, the majority of virus strains that have been classified as subtype O have been isolated from patients from Cameroon or from their sexual contacts. Recent preliminary studies in that country suggest that fewer than 10% of HIV-1 infections there are caused by subtype O strains. A few subtype O infections have also been reported in Gabon and France, but limited studies in several other African countries and Belgium have not found evidence of the presence of this subtype.

Until recently, it appeared that antibodies against all HIV-1 variants were readily detected by established anti-HIV assays. The ability of currently used assays to identify infection by HIV-1 subtype O has not yet been extensively studied, but the sensitivity of several different commercial anti-HIV screening kits was assessed using a limited number of viral samples. The assays evaluated were some of the most commonly used; they were representative of different test principles (competitive, indirect, sandwich, and agglutination tests) and employed various types and combinations of viral antigens (native and/or recombinant and/or synthetic oligopeptide). Approximately 50% of the assays detected antibodies in all

Source: World Health Organization. Technical advisory meeting on implications of the newly identified HIV-1 subtype O viruses for HIV diagnosis. Geneva: WHO; 24 June 1994. (Press Release WHO/50).

serum specimens from individuals in whom infection with HIV-1 subtype O had been confirmed. One assay failed to detect antibodies in any of the specimens tested; the remainder of the assays failed to detect antibodies against HIV-1 subtype O in 10% to 20% of the specimens.

After reviewing the available data, the group made the following recommendations:

1. On the basis of present knowledge regarding HIV-1 subtype O, there is no need to make modifications in the WHO global strategies for HIV antibody testing, including those for blood screening. However, in the area where subtype O virus has been found, diagnostic tests and strategies for HIV antibody testing need to be urgently reevaluated. The appearance of HIV-1 subtype O reinforces the continued need to ensure that blood is used appropriately.

2. A panel of sera collected from asymptomatic and symptomatic individuals with genotypically determined HIV-1 subtype O infection should be established. This panel should be used to assess the sensitivity of the available HIV antibody assays for antibodies against HIV-1 subtype O.

3. Envelope genes of HIV-1 subtype O isolates should be sequenced to provide information that will permit selection of appropriate antigens to be used in the production of HIV antibody assays and to further elucidate the relatedness of HIV strains.

4. Global surveillance of newly recognized HIV subtypes should be expanded, and WHO should help establish a mechanism for this surveillance.

5. Algorithms for the detection and characterization of variant HIV strains should be further developed and evaluated.