20 years of HTLV screening of blood donations in the UK

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Background.

Although most individuals remain asymptomatic, HTLV infection leads to disease in ~10% including adult T-cell leukaemia/lymphoma (ATLL) and a range of inflammatory diseases. In 2002, the UK blood services introduced universal screening of HTLV due to the serious nature of these diseases, evidence of transmission through transfusion, and concern about high prevalence among donors originating from endemic areas. All positive donors were asked about possible exposures and referred to specialist care. From 2017, screening targeted only first-time donors and those providing non-leucodepleted products. We update on the epidemiology of HTLV among UK blood donors from 20 years of screening.

Methods.

Data reported to the National surveillance scheme were reviewed.

Results.

Provisional data from 2002 to 2021 identified 286 HTLV-infected donors (0.7 per 100,000 donations), predominantly HTLV-1. 268 positive donations were made by previously HTLV-untested donors. Of 15 previously tested donors, only 5 had seroconverted within a year of their previous donation. Prevalence in repeat donors dropped from 2.7/100,000 in 2002 to <0.7/100,000 before screening ended in 2017. In 2002, prevalence in new donors was 24.6/100,000 before dropping to around 6.5/100,000, where it has remained since 2014. The majority were women (192/286;67%), the mean age was 42 years. Half were UK-born (146/286;51%) with 137(49%) infections associated with endemic countries (including Caribbean region, West Africa, Iran, and Japan) and acquired vertically or from a heterosexual partner. Interestingly, 5 HTLV-1 positive donors were likely infected through religious self-cutting rituals, known as Matam.

Discussion.

Ongoing surveillance continues to identify positive HTLV-asymptomatic blood donors that would have otherwise gone undetected. Generally females outweigh males annually in HTLV-positive donations. Matam has been identified as a potential source of HTLV-infection in male donors.

Disclosure of Interest Statement:

Nothing to disclose.