

### **POSTER PRESENTATION**

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# HTLV-1/2 is rare among Eastern-European intravenous drug users (IDUs)

Ene-Ly Jõgeda<sup>1\*</sup>, Radko Avi<sup>1</sup>, Merit Pauskar<sup>1</sup>, Eveli Kallas<sup>1</sup>, Tõnis Karki<sup>1</sup>, Don Des Jarlais<sup>3</sup>, Anneli Uusküla<sup>2</sup>, Irja Lutsar<sup>1</sup>, Kristi Huik<sup>1</sup>

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#### **Background**

HTLV-1/2 and HIV likely share the same transmission routes and thus in Europe HTLV occurs mainly among IDUs, interests in clinical implications of HTLV-1/2 coinfection on HIV disease progression have risen. So far the available evidence suggests a protective role of HTLV-2 and adverse effect of HTLV-1 on HIV infection. In Europe, the overall prevalence of HTLV infection is up to 18% among IDUs and less than 1% among blood donors. However, there is no data regarding the overall prevalence of HTLV-1/2 in Eastern-European IDU population where the HIV epidemic mainly lies. We aimed to determine the prevalence of HTLV among IDUs in Estonia and compare it with the rate in healthy volunteers.

#### **Methods**

The study included 345 Caucasian IDUs and 145 healthy volunteers from Estonia. The presence of HTLV-1/2 was determined by nested PCR in 5' long-terminal repeat region; positive controls were used in every PCR run.

#### **Results**

The analysed IDUs resembled IDUs of HIV epidemic in Estonia: the IDU population was mainly male (79%) with median age of 30 years (interquartile range [IQR] 25-34), and had prolonged duration of illegal drug usage (11 years; IQR=7-14). The rate of co-infections was high – 50% were HIV+, 88% hepatitis C positive, 67% hepatitis B positive. 64% of IDUs reported receptive needle sharing in the past and 18% at least once a month during last six months. None of the IDUs carried HTLV-1

but there was a case of HTLV-2 (prevalence 0.3 %; 95% CI 0.05-0.0162). Healthy volunteers were HTLV-1 and HTLV-2 PCR negative.

#### Conclusion

This is the first study investigating the prevalence of HTLV-1/2 among high risk population and healthy volunteers in Estonia. Our results suggest that HTLV is a rare co-infection among IDUs in Estonia.

#### Authors' details

<sup>1</sup>Department of Microbiology, University of Tartu, Tartu, Estonia. <sup>2</sup>Department of Public Health, University of Tartu, Tartu, Estonia. <sup>3</sup>Beth Israel Medical Centre, New York, USA.

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<sup>&</sup>lt;sup>1</sup>Department of Microbiology, University of Tartu, Tartu, Estonia Full list of author information is available at the end of the article



<sup>\*</sup> Correspondence: ene-ly.jogeda@ut.ee