

## **Abstract:**

An immunochromatographic card test (ICT) that uses fingerprick whole blood instead of serum for diagnosis of bancroftian filariasis has recently been developed. The card test was validated in the field in Kenya by comparing its sensitivity to the combined sensitivity of Knott's concentration and counting chamber methods. A total of 102 (14.6%) and 117 (16.7%) persons was found to be microfilaremic by Knott's concentration and counting chamber methods, respectively. The geometric mean intensities (GMI) were 74.6 microfilariae (mf)/ml and 256.5 mf/ml by Knott's concentration and counting chamber methods, respectively. All infected individuals detected by both Knott's concentration and counting chamber methods were also antigen positive by the ICT filariasis card test (100% sensitivity). Further, of 97 parasitologically amicrofilaremic persons, 24 (24.7%) were antigen positive by the ICT. The overall prevalence of antigenemia was 37.3%. Of 100 nonendemic area control persons, none was found to be filarial antigen positive (100% specificity). The results show that the new version of the ICT filariasis card test is a simple, sensitive, specific, and rapid test that is convenient in field settings.