Specific comments

The paper presents a survey of the rates of positive Monospot tests in a region of Northern Scotland over a period of 16 years. The authors of the study detected a decreasing rate of positive tests during this period. In addition, they found a higher frequency of positive tests in winter.

The manuscript is well written, interesting and provides new information concerning the epidemiology of infectious mononucleosis.

However, there is one major aspect, which needs to be clarified:

The Monospot assay detects heterophile antibodies produced in most, but not all patients with IM and sometimes also in patients without acute EBV infections.

The authors of the study mention in the first paragraph on page 4, that the Monospot test sensitivity and specificity are both nearly 95%. As a reference for this statement they cite a paper from G.H. Taylor about cytomegalovirus infections (Ref 26: Taylor GH: Cytomegalovirus. Am Fam Physician 2003; 67: 519-24.).

There are numerous older and newer papers indicating that the sensitivity of the Monospot test for the diagnosis of primary EBV infections is less than 95% and reaches a sensitivity of 85%, whereas the specificity is 95-100%:


Therefore, the gold standard for the diagnosis of acute and latent EBV infections is the detection of IgM and IgG antibodies against defined EBV-antigens, which were used in this study from 2000-2012.

The authors of the study should mention and discuss this aspect in the manuscript. It would be better, if all data were based on serological tests, but these data are not available in this retrospective analysis anymore. At least, the authors should analyze their serological data collected after 2000 with the question if they find the same decrease of IM incidence and changes.