

## LOW DETECTION RATES OF HEPATITIS DELTA IN GREATER MANCHESTER IN HEPATITIS B SURFACE ANTIGEN POSITIVE PATIENTS MONO-INFECTED AND COINFECTED WITH HIV

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### Background

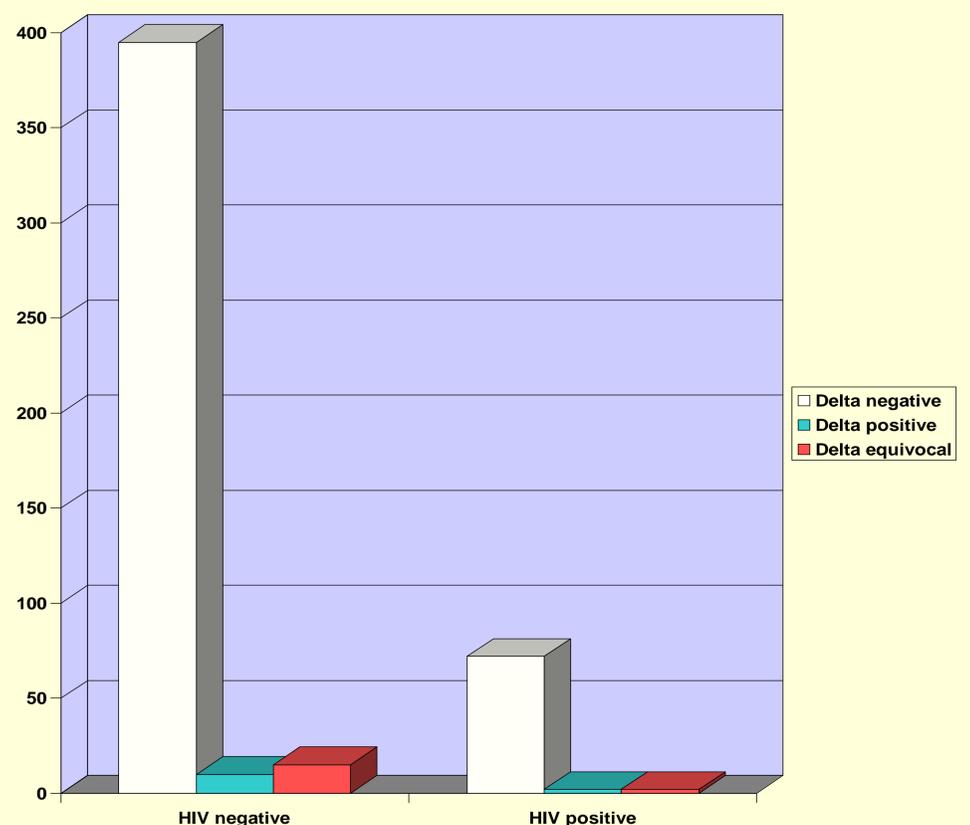
Hepatitis delta virus (HDV) is dependent on co-infection with hepatitis B virus (HBV). It has traditionally been considered uncommon in the UK and mostly seen in parenteral injectors. A study in South London suggested a prevalence of 8.5% [1]. Recent British HIV Association (BHIVA) guidance suggests that all HIV positive patients should receive annual testing for HDV. The European Association for the Study of the Liver guidance recommends testing all HBV surface antigen (sAg) positive patients once for HDV. We undertook a service evaluation in our population of patients in the Greater Manchester area to ascertain the prevalence of HDV infection. We also looked for any difference in prevalence between HIV positive and negative individuals.

### Methods

We reviewed 718 HDV requests done within our Monsall unit between 1st January 2010 and 30th September 2011. We excluded those requests from outside our unit. We divided this cohort into HIV positive (Group A) and HIV negative (Group B) by confirming who was attending for regular HIV viral load monitoring.

### Results

- We discovered 76 patients were HIV positive (Group A) and 420 were HIV negative (Group B) with no patient of unknown HIV status.
- 72 patients in Group A were IgG HDV negative (94.6%), 2 were equivocal (2.6%) and 2 were positive (2.6%), with one of them known prior to screening policy. 395 patients in Group B were IgG HDV negative (94%), 15 patients were equivocal (3.6%) and 10 were positive (2.4%).
- Both IgG positive patients in Group A were HDV RNA positive and 3 of the 10 IgG positive patients in Group B were IgM or HDV RNA positive (6 were negative for both and 1 was not re-tested by the end of study period).
- All equivocal patients in both groups were negative in all other markers.



### Conclusions

- Our results demonstrate that in the Greater Manchester area, testing of 76 patients co-infected with HIV and HBV, who were not known to be delta positive picked up 2 cases but only one who was not known prior to starting screening (1.3% chance of detecting new infection).
- In the HIV negative population, 10 of the 420 patients tested were positive for delta, with only 3 (+1 with data missing) having evidence of active infection (0.7%). There was no difference in prevalence between the 2 groups.
- **Clinically significant Delta infection is rare in the UK and recommendation to test for it annually might need to be re-assessed, although the recommendation to screen all patients once seems appropriate.**

[1] Cross TJS, Rizzi P, Horner M et al. The increasing prevalence of hepatitis delta virus (HDV) infection in South London. J Med Virol 2008; 80: 277–282.