Table 1: Blood tests of HCV oral treatments

Hepatitis C treatment in people who inject drugs (PWIDs): the end of venous blood monitoring?

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BACKGROUND

With the introduction of interferon free direct acting antivirals (DAAs) for hepatitis C, it has been reported that haematological and biochemical abnormalities are particularly low in individuals who are on ribavirin free regimens. Routine vene-puncture during treatment can be challenging for PWIDs and can be detrimental to engagement in treatment

AIM

The aim of the study was to monitor changes in blood tests during ribavirin free oral treatments provided in our centre.

The study was carried out between April 2015 and August 2016. All individuals included on the study were on interferon and ribavirin free DAAs. Treatment duration was either 8 or 12 weeks. Bloods were taken in nurse led clinics pre treatment and at weeks 2,4,8 and 12.

RESULTS

Two hundred and twenty four patients received hepatitis C treatment and 86 were eligible for the study, 84 (97.6) completed treatment. Six were co-infected with HIV, 52 (60.4%) were on drug substitution therapy, 51 (59.3%) had Metavir score of F0-1.Three were excluded as they did not attend for blood tests. Treatment regimens included Harvoni 8 weeks (44), Harvoni 12 weeks (20) and Viekirax and Exviera 12 weeks (19).

RESULTS (Cont'd)

A student's T-test was used to compare bloods tests taken pre treatment with the end of treatment bloods. Significance value was set at 0.05. (Table 1). There was no significant reduction in haemoglobin (Hb) and platelets or significant increase in urea, creatinine or bilirubin. There was a significant decrease in both alanine amino-transferase (ALT) and gamma-glutamyl transferase (GGT).

The majority of individual's blood tests were within our normal range before starting treatment. Three had Hb below 120g/L, 6 had platelets between 100x10^9/L and 150x10^9/L. One post renal transplant patient had high levels of urea and creatinine. None of these individuals had significant drop or rise in bloods. There were no flares in ALT or GGT.

Blood tests	Pre treatment (average)	End of treatment (average)	p value
Hbg/L	143	142	0.28
Platelets x10^9/L	224	227	0.68
Urea umol/	4.9	5.5	0.35
Creatinine umol/	71	72	0.67
ALT U/L	76	24	<0.0001
Bilirubin umol/	10	9	0.52
GGT U/L	99	47	0.001

Table 1: Bloods tests pre and post treatment

CONCLUSIONS

In this group of patients there were no significant adverse changes to blood tests.

Routine monitoring of blood parameters particularly in individuals whose bloods tests are within normal range before starting HCV treatment can be abandoned. This could have a significant impact when deciding in which care settings treatment can be provided.