Is the Emergency Department a suitable environment to offer Hepatitis Screening (VirA+EmiC)

L Hunter [1], C Lojo Rial [1], G Nebbia [2], S Douthwaite[2]

[1]Emergency Department , Guy's and St Thomas' NHS Foundation Trust, London, UK

[2] Department of Infectious Disease, Guy's and St Thomas' NHS Foundation Trust, London, UK

Background

- In the UK, 214 000 people live with chronic hepatitis C and about 180,000 with Hepatitis B. There is increasing evidence to show that routine Hepatitis testing is warranted in endemic areas, given the impact on healthcare provision and the dramatic consequences of late diagnosis, such as liver fibrosis, cirrhosis, decompensated liver disease or hepatocellular carcinoma if left untreated.
- We conducted a six week project to determine if the Emergency Department (ED) offers a suitable environment for Hepatitis screening an area of high local prevalence .

Methods

- Electronic Record Programme (EPR) modification
- Patients (>16 years) were offered HepBsAg and HepC IgGAbs testing if they required venepuncture during their ED attendance over a 6 week period from February 15th 2016- March 27th 2016.
- Tests were ordered utilising a pre-configured order-set with pre-selected HepBsAg and HepCIgGAbs.
- Patients were informed of the intention to test all attendances and were able to opt out if desired
- Positive test results were followed up at a rapid access one stop Infectious Diseases clinic

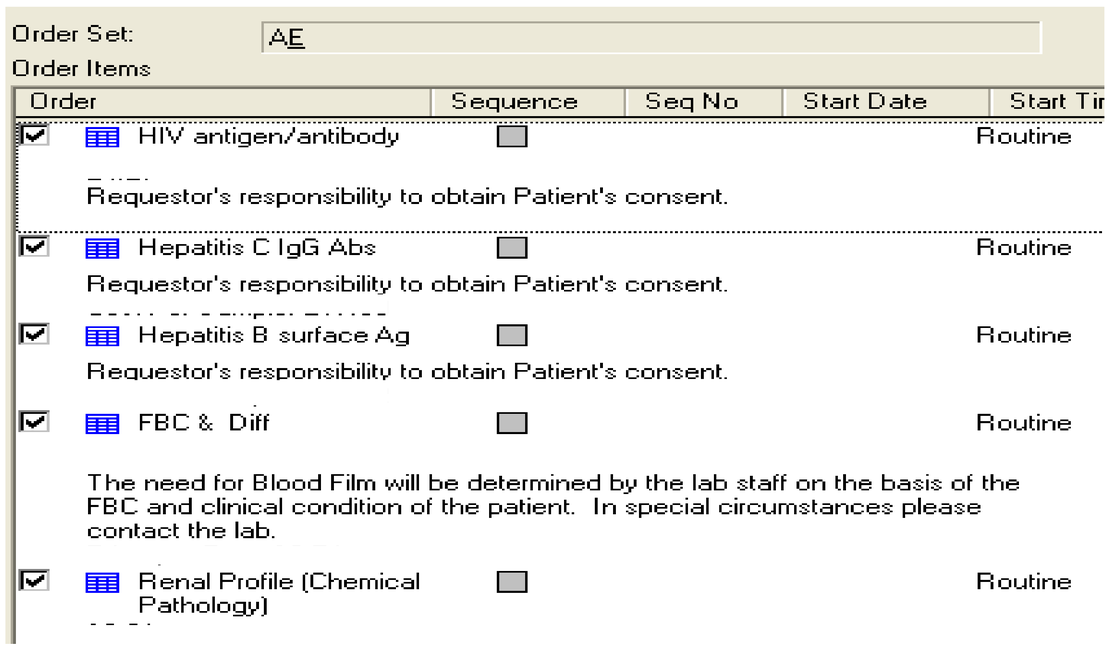

Figure 1: Blood order-set

Results

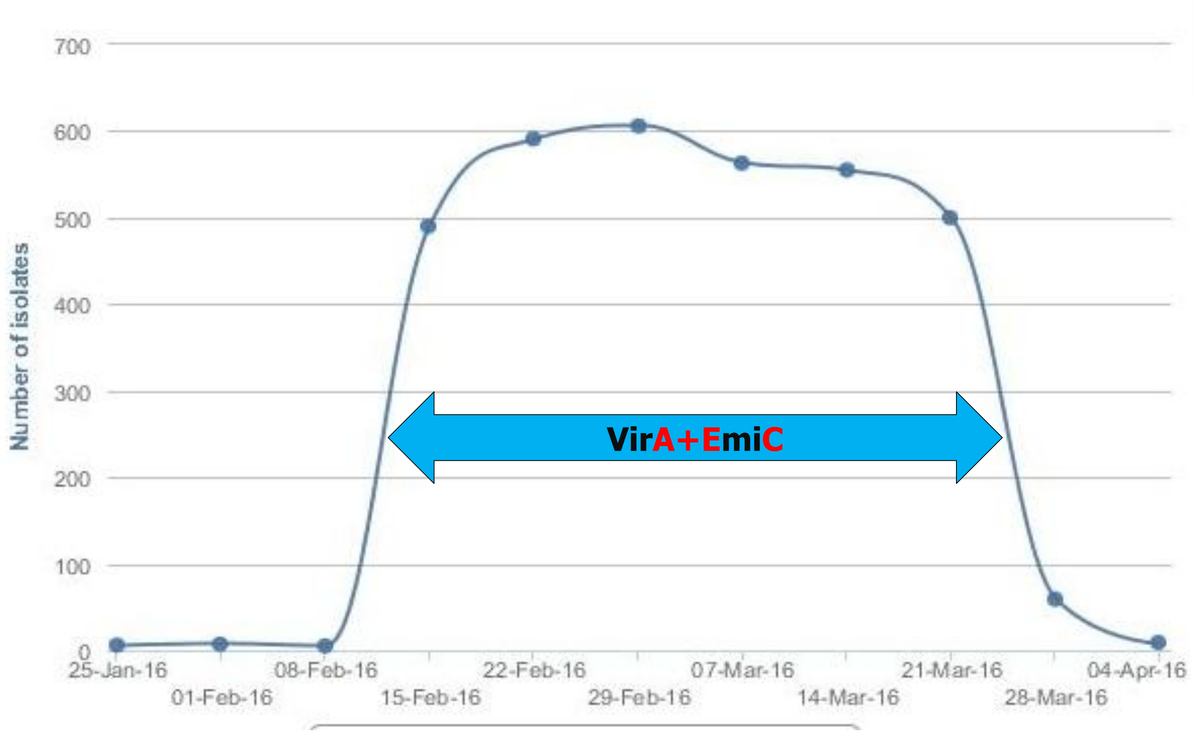

Fig 2: ED Hepatitis testing rates pre, during and after demonstration project

6 weeks results	HBV	HCV
Tests (uptake %)	3,073 (49%)	2,982 (47%)
Positive (%)	n= 35 HBs Ag (1.1%)	HCV Ab: n= 66 (2.2%) HCV Ag: n = 35 (1.2%)
Median age (range)	42 years (24-82)	41 years (22-77)
Sex	Male 70%	Male 72%
Primary ethnic group	Black / Black British 40%	White British 40%
Already in care	4/35 (11%)	4/35 (11%)
Linkage to care	16/31 (52%)	12/31 (39%)
Treatment outcome		2 (17%) newly diagnosed commencing HCV treatment

Conclusions

We achieved testing rates of approximately 50% by using a pre-configured blood order set and opt – out policy. Our local prevalence was 1.1% and 1.2% for hepatitis B and C respectively compared to a suggested UK prevalence of 0.3%.

A one-stop clinic provides rapid entry in to care for positive patients and reduces burden of follow up in the Emergency Department. Based on our results, we estimate that this program would allow acute hepatitis patients to enter care earlier and prevent morbidity and mortality associated with chronic infection. We are currently undertaking an extended project offering testing within the Emergency Department, to determine linkage to care data and cost-effectiveness.

References

- N.I.C.E Guideline [PH43]: Hepatitis B and C testing: people at risk of infection www.nice.org.uk
- Standards for Local Surveillance and follow-up of Hepatitis B and C Health Protection Agency www.gov.uk

This project has been supported with an educational grant via the Gilead UK and Ireland Fellowship Programme