Clinical recommendations for pre-treatment assessment of people preparing to initiate therapy for chronic hepatitis C infection

Therapy for chronic hepatitis C infection is known to reduce the risk of liver disease and cancer and improve quality of life. Expansion of access to therapy in England has been associated with a significant reduction in mortality from liver disease and there are abundant reports of beneficial lifestyle changes following successful antiviral treatment in marginalised individuals, suggesting that treatment may empower individuals to modify behaviour and improve overall physical and mental health. Antiviral medications for hepatitis C have been extensively used throughout the world and have an excellent safety profile. However, the safety of medications that include protease inhibitors has not been established in people with decompensated cirrhosis and it is known that in people with cirrhosis the risk of liver cancer is reduced, but not abolished by viral eradication, necessitating long term surveillance in people with cirrhosis who have been successfully treated. Sterilising immunity to hepatitis C does not develop leaving people who have been cured of their infection at risk from re-infection. Hence the very significant benefits of antiviral therapy need to be balanced against the possible risks of harm from drug induced exacerbation of decompensated cirrhosis or neglect of other important health practices.

Regular engagement in health services may be uncommon in some patients with hepatitis C and lifestyle choices may preclude lengthy encounters with health care professionals. It is important that services are configured to meet the needs of people who do not want to re-attend clinics and have very limited time to engage with services. Service providers should be aware that many people with hepatitis C are reluctant to provide venous blood samples and care must take account of the unique needs of the population at risk.

It is essential that any service for people with chronic hepatitis C avoids practices that could be construed as providing a lower standard of care to patients with particular psycho-social circumstances. It is important to avoid any impression of a ‘two-tier service’ with people treated in non-hospital settings receiving a lesser standard of care. It is equally important to ensure that all people who may benefit from antiviral therapy have an opportunity to undergo treatment in a setting that is suited to their needs and takes account of their personal preferences, even when those choices involve avoidance of investigations that health care professionals regard as desirable. These are difficult decisions requiring a balancing of the risks/benefits of therapy and the patient’s understanding of the issues. It is therefore important that all patients are discussed at a properly constituted multi-disciplinary meeting where a range of opinions can be considered. It is recognised that in some circumstances urgent decisions on treatment may need to be made and under these circumstances approval from the chair of the MDT, or a nominated deputy, should be

obtained prior to treatment initiation and the decision should then be ratified at a properly constituted MDT.

The following core principles should be adhered to

- All those with HCV viraemia should be offered treatment
- Where patients are engaged in care, a full assessment prior to therapy may help tailor treatment and subsequent follow up
- Patients who are less engaged in care may benefit from a minimal work up to allow prompt therapy
- Patients who are unable to complete a course of therapy may often be cured and the risks of compromising future therapy is low, therefore therapy should not be withheld because of concerns about full compliance
- The risk of reinfection should not be considered a barrier to treatment, but efforts should be made to engage contacts and provide access to harm reduction services

Recommendations

1. All patients with chronic HCV infection should be offered a face-to-face meeting with an experienced health care professional in an environment with access to venous blood sampling (via femoral and neck veins if appropriate) and elastography scanning. Ready access to ultrasound scanning, potentially at a different site, should be made available for those in whom it is required. In patients who decline to attend such a setting treatment should be offered based on an assessment of the risks and benefits of therapy.

2. A pre-treatment venous blood sample is not essential prior to therapy but is advantageous and if blood sampling is not possible the essential pre-treatment assessments must be completed (see below). Where blood draw is possible but volumes are limited the following should be prioritised – viral detection (including genotype on the same sample), renal function, full blood count to assess platelets, liver function tests (including bilirubin and albumin). If venous blood cannot be obtained then a dried blood spot or capillary sample may be used to assess virological status, ideally including a viral genotype to allow modification of treatment follow up and to assess any re-infection. Viral genotype may be documented after therapy with a pan-genotypic drug has been introduced.

3. All patients should be counselled prior to therapy about the risks of re-infection and the lack of sterilising immunity from HCV infection. Support and guidance regarding local harm reduction services should be provided. A failure to engage in harm reduction activities is not a contraindication to treatment but it is important that the opportunities to engage in harm reduction services are repeatedly made.

4. An assessment of liver fibrosis should be strongly encouraged. This may involve physical (elastography) or biochemical (e.g. APRI score, platelet count) assessment and if this is declined the risks of cirrhosis should be discussed with the patient and documented in the medical records. Patients who initially decline an assessment of fibrosis should have the offer repeated after therapy has been introduced.

Essential components of pre-treatment assessment to ensure treatment is safe must include:-

a. Confirmation of on-going viraemia with a historic blood sample and a high probability of on-going infection is required prior to therapy in all patients

b. Assessment of concomitant medications. If there is concern regarding potential use of medication that interacts with antiviral therapy discussion with the patient's general practitioner should be undertaken. Note that current illicit drugs do not interact with antiviral therapies and therefore an accurate history of illicit drug use, whilst desirable, is not essential prior to therapy. A number of anti-epileptic medications (e.g. phenytoin, carbamazepine) and anti-tuberculous therapies (e.g. rifampicin) are absolutely contraindicated in people undergoing antiviral therapy and patients should be specifically questioned about these medications. A helpful website to address drug-drug interactions is https://www.hep-druginteractions.org/ .

c. Assessment of the likelihood of decompensated cirrhosis or renal failure. If there is a suspicion of decompensated cirrhosis therapy should only be instituted after an assessment of the risk-benefits and protease inhibitors should be avoided. In patients who decline to undergo an assessment of renal function a history of previous renal problems should be documented and an individual risk assessment undertaken. In patients where there is concern regarding renal function therapy with protease based treatments should be preferred

d. The risks of co-infection with HIV, HBV (either current or previous) should be considered and it is strongly recommended that any blood sample is tested for HIV infection. Screening for chronic HBV infection and exposure (via HBV core antibodies) is advised.

These offers should be documented in the clinical records and other agencies involved in the care of the patient (e.g. general practitioners, addiction services) should be informed about the decision to introduce therapy.

Issuing medication

Prior to commencing therapy all patients should have a discussion of the risks and benefits with an experienced nurse or other health care provider and the essential investigations completed. Provision of therapy in the absence of a discussion with a nurse or health care worker should only occur in exceptional circumstances which should be clearly documented. Following this discussion, completion of the essential investigations and presentation of the data to a recognised prescriber it is appropriate for a qualified prescriber to issue a prescription for medication.