

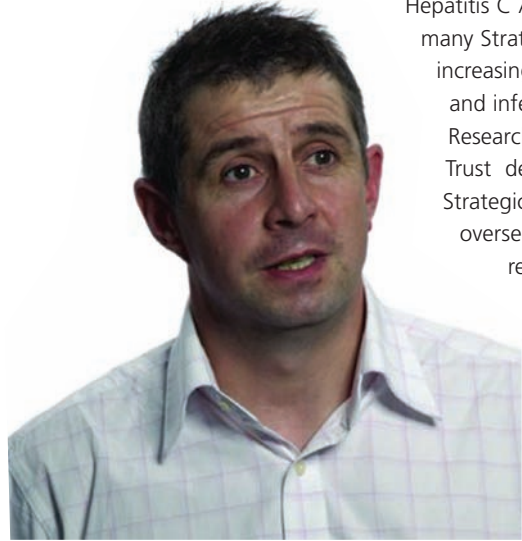
focus on

Microtechniques

Testing for Blood-Borne Viruses: the reach for wider sampling

By Richard Crompton

World Aids Day took place on 1st December, with world leaders, the most prominent being President Obama, pledging support for estimated 15 million HIV carriers across the globe. In the UK an estimated 90,000 people have HIV.



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Since the Department of Health published its Hepatitis C Action Plan for England in 2004, many Strategic Health Authorities have found it increasingly difficult to tackle Hepatitis C – and infection rates are rapidly increasing. Research conducted in 2009 by the Hepatitis Trust demonstrated that up to 70 percent of Strategic Health Authorities are still failing to oversee the Hepatitis C Action Plan's requirements. One of the challenges facing emerging clinical commissioning groups will be to effectively deliver access to testing for blood borne viruses and turn this situation around. In the process commissioners will begin to bring blood borne viruses under better control with clear benefits to patients and reducing the long-term cost of care for the NHS.

Among other benefits: the time needed to perform the test is significantly reduced, increasing the number of clients that can be tested. Dried blood spot testing is also an innovative and less invasive approach when dealing with a patient who is needle phobic. As a result the process can result in a better experience for the patient/ blood donor.

Dried blood spot testing is a simple process that can be carried out by any member of staff after training, and can be completed at GPs, drug clinics and rehabilitation centres. The process involves the following:

1. Before the collection begins, the patient is given pre-test counselling to clearly explain what the test is, what it does and what the results will mean.
2. The lancet is placed at the tip of the finger and activated to release a small blade which punctures the skin. The blade then disappears back in to the lancet to avoid any accidental needle injury.
3. The blood spots produced by the puncture are collected on the blotting paper provided.
4. The card is air dried on the rack provided and then put into a sealed bag.
5. The results are sent off to the lab with the completed paperwork.
6. Screen results are returned in 5 working days from receipt of the sample at the laboratory. Hep C PCR results are provided in 10 working days from receipt of the sample at the laboratory.

When working with drug users testing should be carried out twice a year. By testing frequently, early diagnosis can be detected allowing less costly treatment for an individual who has contracted the virus, and, most importantly, will give the individual an increased chance of recovery while also reducing the long-term costs of treating the patient.

Aftercare provision

When delivering the result to the patient, it is crucial to plan out a clear pathway for recovery, as it is vital that patients with positive results are supported immediately. Those with negative results need to be made aware of the continued risks of needle usage and the importance of regular blood testing.

It is important to remember that whether a result is positive or negative, the testing process gives staff the opportunity to raise the person's awareness of what they can do to reduce their risk of acquiring blood borne viruses.

While members of the public may present for blood testing, it is essential also to safeguard the health of NHS staff that perform blood testing. Managing the occupational risk of blood borne infections is an important public health objective and dried blood spot testing can help to reduce the risk of infection amongst staff.

In 2009, 11,005 Hepatitis C infections were diagnosed in the UK and around 90 percent of these infections will have been acquired from injecting drug use, according to the UK Health Protection Agency. Nobody can doubt that there is still a lot of work to be done in order to reduce infection rates in the UK, particularly amongst intravenous drug users.

Concateno is a subsidiary of Alere Inc, a global leader in rapid diagnostics.

Hepatitis C

Hepatitis C is asymptomatic, remaining dormant in an individual's system for a long period of time. Difficult to detect but yet early detection is critical if health professionals are to improve the person's chances of recovery. Taking preventative approaches, commissioners can encourage people to come forward for Hepatitis C testing which will mean the infection has a high chance of being cleared.

Over the past two years an increase in injecting steroid users has led to a new, high-risk group for Hepatitis C. Needle exchanges across the UK have seen a rise in steroid users of up to 80 percent. Most needle users will only ever encounter services through the needle exchange, as they often feel uncomfortable approaching traditional healthcare services or drug clinics. Clinical Commissioning Groups can take steps now to encourage Hepatitis C blood testing at needle exchanges to give more users the opportunity to be tested, providing early diagnoses of hepatitis C.

Blood testing

Testing for blood borne viruses, whether at drug clinics or needle exchanges, is vital in the fight against the spread of infection. One of the ways that has helped to provide easier testing services to intravenous drug users is the introduction of dried blood spot testing.

As an easier method of blood collecting, non-medical staff can be trained to collect samples for blood borne virus tests at needle exchange or substance misuse clinics. Dried blood spot testing uses a lancet so sample collection is much quicker than using traditional blood taking methods. This minimises the risk of an accidental needle stick injury and removes the problems associated with people with compromised veins.

¹ Health Protection Agency, Shooting Up.