Faculty of Forensic & Legal Medicine

Forensic Science Sub-committee

NEWSLETTER January 2022

Updated versions of the following documents are available in January 2022:

- **Recommendations for the collection of forensic specimens from complainants and suspects;**
- **Recommendations for the collection of forensic specimens from complainants and suspects – the evidence;**
- **Labelling Forensic Samples;**
- **Forensic Science Subcommittee (FSSC) Newsletter;**
- **Information for complainants undergoing a forensic medical examination.**

'Drug Spiking'

Following the recent reports of 'drug spiking', where a person is allegedly injected/'spiked' from an unknown source, there was a discussion at the FSSC in November and a reminder about the management of such cases went out in the FFLM Friday Bulletin on Friday 11 November 2021.

Members are reminded to review the *FFLM Recommendations document for the collection of forensic specimens from complainants and suspects*.

Alcohol is the most likely used substance in drug facilitated crime (DFC) but other drugs such as gamma-hydroxybutyrate or gamma-butyrolactone (GHB/GBL) may also be used. GHB/GBL are very short acting drugs. If a forensic HCP is contacted about a suspected case of DFC then they should advise the police/first responder to take a urine sample as soon as possible, and follow this up with a blood sample, as per the Recommendations' document. If the incident happened 3 days or more ago, it is recommended that a hair sample should be taken a minimum of 4-6 weeks after the date of interest. This is important for drugs that are quickly eliminated, such as GHB/GBL, even if a urine sample is taken. In this instance, it is advisable for any urine samples to be stored and analysed later, if applicable, following the results from the hair analysis.

Targeted forensic examination, of clothing if there is a suspected injection site or absorbed spillage, and other drug paraphernalia (such as syringes, even if only residue remains inside), may be helpful as the residue of certain drugs may be found – please advise the police as appropriate.

The HCP should assess the complainant of suspected DFC taking a detailed history in relation to substance use, noting any symptoms, as well as examining for any signs of drug use, and for any injuries, including a potential needlestick injury. Further treatment may be required. Consideration may need to be given to HIV Post-Exposure Prophylaxis (see the *BASHH guidelines*); hepatitis B status and prophylaxis if appropriate; testing for Hepatitis C at 3 and 6 months; and referral to a local SARC if appropriate.

Please also see the most helpful *Statement and advice from NHS Grampian, following recent reports of spiking by injection*.

National Forensic Kits

National Forensic Kits are now available from SceneSafe based on the *FFLM Recommendations document for the collection of forensic specimens from complainants and suspects*. The kits and their contents are listed on the *FFLM website.*

Arterial or venous blood - does it matter?

The FFLM recommends (*https://fflm.ac.uk/resources/publications/blood-samples-in-hospital-for-unconscious-incapacitated-patients*) that it is acceptable to take blood from a cannula, central, or arterial line if no other site is available. Document the specific site in your notes and whether the blood is venous or arterial.

Recently, a question was sent asking where this information should be documented, so that the toxicologist is made aware. There is a small difference between the two, arterial and venous, but there is no compensation or adjustment made to the results to allow for it being arterial. The law mentions blood and does not specify whether the sample is venous or arterial.

It is important to document in your notes and ask the officer to document on the MGDD forms and if possible on the tamper evident bag.

Questions to the FSSC

1. **Chain of evidence forms that may accompany samples forwarded to NHS labs e.g. STI tests when there is a possibility of the result being of forensic significance. In NHS Greater Glasgow and Clyde, we have been looking to update the form to reflect the process locally. The Royal College of Pathology document relating to this is dated 2017. It uses the term 'senior' scientist however in reality the sample would be received and the chain of evidence form signed by the BMS grade working that shift.**

   In addition, with the use of electronic data collection, the labs are keen to have the option of scanning the document when a result has been obtained. I would be keen to know if FFLM would wish to either endorse or update existing guidance to support current practice.

   The committee discussed and advised that it would be dependent on local procedure and policy. In summary the feedback would be to ensure a local process is in place.

2. **Would the Faculty be interested in making recommendations on the most appropriate way of documenting injuries on body maps that both supports onward investigation and prosecution of a disclosure of sexual violence whilst allowing a holistic approach to medical management?**

   Some background to my query may be helpful. The courts have requested that clinicians avoid annotating directly onto the body maps and noting descriptions of findings separately in the body of the report. This allows redaction of noted findings that the courts are not requiring to present to the jury whilst accepting that some findings may not be directly related to the incident on trial however are important to note in the interests of the medical well-being of the patient e.g. previous self-harm scars.

   At St Mary's SARC for example, separate body maps are used depending on what was being documented – a white body map for injuries/findings related to the incident and a yellow body map for other markings e.g. tattoos, piercings etc.

   Much depends on the experience of the clinician and whether the clinician was making an opinion e.g. if the injury is related to the offence.

   It was highlighted that it is important to record everything at the time of examination because the clinician does not know what is or is not relevant. Overall this is an important training issue.

   In summary it is important to document all findings at the time of examination and that separate body diagrams may be of use.

3. **The consideration of the inclusion of a recommendation for endocervical swabs as a routine part of female genital sampling. Alternatively further explanation or reasoning for not sampling endocervix following vaginal 'penetration without ejaculation' by penis, object or digit.**

   In cases of amnesia of events due to intoxication, I would offer a full genital forensic examination including endocervical swabs although this isn't the FFLM recommendation currently. The examination is undertaken from 'outside in' and with high vaginal swabs taken distal to the speculum blades.

   Despite this cautious approach to minimise the transfer of suspect DNA during the examination, might endocervical swabs also be found to be positive following penetration without ejaculation?

   The committee noted that a similar question had been submitted for consideration at the previous meeting. A paper listed in the Evidence document on detecting male DNA on vaginal swabs in sexual assault found male DNA on endocervical samples in some cases of alleged digital penetration.

   It was noted that the table did not recommend endocervical swabs for cases of digital penetration. The committee discussed and highlighted that if there is a lack of clarity on the nature of the assault, all swabs should be taken. It was noted that endocervical swabs would be intrusive and difficult for some complainants. The committee agreed no changes were required to the recommendations as it was a training issue.

4. **Following disclosure of anal penetration - anal samples along with the recommendation for female genital samples if a female patient but not male. I assume this is based on the possibility of the transfer of material.**

   Offering penile samples to a male following non-consensual anal penetration might perhaps corroborate the account that it was just anal....but it could be useful also where the complainer isn't sure what happened but recalls anal penetration only.

   It was highlighted that whilst there were was a risk of contamination with females, the same issue did not apply to males. It was unlikely to assist in any interpretations. The committee agreed penile swabs should be taken if the complainant was unsure what had happened. Furthermore penile swabs might also be useful if there was a counter allegation from the suspect.

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on behalf of the Faculty of Forensic & Legal Medicine

Send any feedback and comments to forensic.medicine@fflm.ac.uk