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Faculty of Forensic & Legal Medicine

Recommendations for collecting hair samples for toxicology

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Hair sample collection kits are available. The following are guidelines for when the kits are not being used or are not available and a hair sample is being taken from a live examinee. Collect the hair sample in a drug-free environment, wherever possible. The hair sample should only be taken a minimum of 4-6 weeks after date of interest.

Method of sampling and packaging

1. A lock of hair, the width of a pencil (approximately 1cm), should ideally be taken. This should preferably be taken from the vertex posterior (back of the head below the crown).

2. Wearing gloves, select a suitable lock of hair and tie the lock near the scalp with thread or string (to keep the hairs aligned).
3. Using a new or cleaned (preferably using non-alcohol containing cleaning wipe or antibacterial wipe) pair of scissors, cut the lock of hair as close to the scalp as possible. Leave the thread/string on the lock of hair.
4. Place the lock of hair in unused aluminum foil or clean piece of paper. Annotate on the foil/paper which is the 'cut' end of the lock i.e. the end that was closest to the scalp. It is important for the laboratory to be able to distinguish the alignment of the lock.
5. Fold over the foil or paper to enclose the hair lock. Place in a tamper-evident bag and seal.
6. Record whether the examinee uses any cosmetic treatments on their hair (e.g. dyeing, bleaching, perming, straightening etc.) and the dates of any such treatments between the incident and sampling.
7. Hair extensions should be taken the same as other hair samples i.e. cut as close to the scalp as possible and leave extensions on the hair. The extensions should keep the hair aligned so there may be no need for hair to be tied first with thread/string.

Alternatives

- If the hair is very short and it is not possible to tie off a lock, then a 'tuft' of hair should be collected and placed in foil or paper.
- If head hair is not available, then an alternative site can be used (pubic, axillary etc.).
- If no hair is available consider collecting a nail sample. See *Recommendations for collecting nail clippings for Toxicology*.

Storage

Hair samples for toxicology must not be frozen or refrigerated, but stored dry, at normal room temperature.

References

Society of Hair Testing
Recommendations for hair testing in forensic cases
Forensic Sci. Int. 145 (2004), 83-84

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