

Toxicology analysis to evidence intoxication and neglect

Using a specialist expert forensic adviser to analyse toxicology results, linking drug use to the time of an offence.

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Key details

Purpose	Investigation cases
Topic	Child abuse Drugs and alcohol offences Forensics
Organisation	Warwickshire Police
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Description

A 17-month-old child was presented at the hospital by his biological parents. They stated that around 11am the same day, the child had fallen off a chair in the garden onto the concrete floor. He had grazes and swelling on his head. After examination, the child became very unwell and further assessment suggested the injuries could be non-accidental or caused by neglect.

Following investigation, it was discovered that the child had a head fracture from falling feet first out of an open first-floor window at the home address. He was discovered by neighbours who had

attempted to alert the parents by banging the front door and shouting up at the open window.

Police suspected the parents may have been under the influence of drugs and alcohol at the time of the child's fall. They were arrested and blood samples were taken before their release from custody 36 hours following the offence. The samples were tested for alcohol, common drugs of abuse and medication.

The forensics provider had initially refused to conduct an analysis as the testing could not show when the drugs were taken and would therefore not be able to prove an offence of neglect. A senior officer requested that the tests be conducted to assist the investigation and the results showed benzoylecgonine (a chemical formed in the body when cocaine is broken down) was present in samples taken from both parents.

Line of enquiry

Police engaged an expert adviser, Principle Forensic Toxicology and Drugs Consultancy Ltd, to provide an expert opinion on when the drugs would have been taken. Based on the half-life of benzoylecgonine, the time elapsed since the offence and the level of the chemical in the blood, it was concluded there would have been a large amount of cocaine taken around the time of the offence.

Outcome

The parents abandoned a request for a Newton Hearing (to dispute intoxication but admit poor supervision of the child) and pleaded guilty to all charges. They subsequently received an 18-month prison sentence.