UKHCDO paediatric working party position statement on medico-legal requests for haemostatic investigations in children with possible non accidental injury.

- Where a child with bleeding or bruising symptoms is being investigated for possible non accidental injury, clinicians are advised to follow the British Society of Haematology best practice advisory. This document outlines first line and second line testing according to clinical suspicion of a bleeding disorder:

Haematological evaluation of bruising and bleeding in children undergoing child protection investigation for possible physical maltreatment

- Any child with persistent abnormal bleeding and bruising in the opinion of a paediatric consultant, should be referred to an NHS consultant haematologist specialising in bleeding disorders, for consideration of further investigation.
- For a child with **no** persistent abnormal bleeding or bruising symptoms (e.g. no abnormal bruising after being placed in foster care), further haemostatic investigations are unlikely to be in their best interests, for the following reasons:
    - The only two severe bleeding disorders not ruled out by a normal coagulation screen and normal platelet count occur with a frequency of around 1: million.
    - Any mild bleeding disorder (for example a mild clotting factor deficiency or a mild platelet function defect) would not cause *spontaneous* bruising (that is, some form of trauma either accidental or non-accidental will have led to the bruise).
    - Platelet function testing to identify or rule out a mild platelet function defect requires 10-20 mls of blood with rapid laboratory processing in a specialist laboratory. These tests are not carried out by specialists in bleeding disorders care in the UK in children under 1 yr of age, as the results are uninterpretable in this age group (that is, a mild abnormality is likely to correct with age, reflecting the inadequate normal ranges in this age group). Ideally, they are delayed until a child is over 3 yrs old to be able to obtain an adequate volume and interpret results.
    - There is a high likelihood of an artifactually abnormal result when platelet function tests are done in small children outside of specialist centres, because of the way in which the sample is taken and any delay in sample processing. Members of the working party have been asked to repeat platelet function tests done in the private sector as part of 'medicolegal' investigations and 'abnormal' tests have not been reproducible. A child could be exposed to multiple attempts to take significant quantities of blood, with the risk of a false positive result, and a possible miscarriage of justice, if legal weight were given to the result. Such testing is very distressing for the child and their carers.
- National guidance regarding genetic testing for inherited bleeding disorders can be found at Recommendations for the clinical interpretation of genetic variants and presentation of results to patients with inherited bleeding disorders. A UK Haemophilia Centre Doctors’ Organisation Good Practice Paper
- Genetic testing in a child without a confirmed bleeding disorder, as a 'fishing exercise', is not considered ethically acceptable by this group and does not meet the strict testing criteria of the National Genomic test directory . rare-and-inherited-disease-eligibility-criteria-v2.pdf