

A11 Sickle cell disease

Guidelines for performing sickle and sickle-trait autopsies

- A11.1 The autopsy should be performed as soon after death as possible – sickle cells unsickle sometimes after death and good morphology is lost.
- A11.2 All the clinical data, including recent microbiology, and radiology must be gathered.
- A11.3 Samples of blood and lung should be taken for microbiological culture.
- A11.4 Blood and urine samples for toxicology are required if painkiller overdose (e.g. pethidine) is suspected.
- A11.5 The heart must be examined carefully for the full range of causes of sudden cardiac death.
- A11.6 Evidence of the acute chest syndrome, gross and histological, must be sought.
- A11.7 Histology from all relevant organs must be taken, particularly the lungs, bones and marrow, muscle, kidney and heart.
- A11.8 Fix tissues in buffered formalin, to reduce post-mortem intravascular sickling.
- A11.9 Distinguish between post-mortem sickling (HbSS and HbAS cells can do this) and pre-mortem sickling.
- A11.10 The clinical pathology should be discussed with the clinicians; if the case is Coronial, it should be emphasised to the Coroner the importance of seeking detailed statements from the clinicians to determine, as best as possible, the sequence of events that led to death.