

Appendix 7

ROUTINE SAMPLES TO BE TAKEN IMMEDIATELY AFTER THE SUDDEN UNEXPECTED DEATH OF A CHILD UNDER 2 YEARS OF AGE

Sample	Send to	Handling	Test
Blood (serum) 1-2ml	Clinical Chemistry	Spin, store serum at -20 ⁰ C	Toxicology
Blood cultures – aerobic and anaerobic 1ml	Microbiology	If insufficient blood, aerobic only	Culture and sensitivity
Blood from Guthrie card	Clinical Chemistry	Normal (fill in card; do not put into plastic bag)	Inherited metabolic diseases
Blood (Lithium heparin) 1-2ml	Cytogenetics	Normal – keep unseparated	Chromosomes (if dismorphic)
Cerebrospinal Fluid (CSF) A few drops	Microbiology	Normal	Microscopy, culture and sensitivity
Nasopharyngeal aspirate	Virology	Normal	Viral cultures, immuno-flourescence and DNA amplification techniques
Nasopharyngeal aspirate	Microbiology	Normal	Culture and sensitivity
Swabs from any identifiable lesions	Microbiology	Normal	Culture and sensitivity
Urine (if available)	Clinical Chemistry	Spin, store supernatant at -20 ⁰ C	Toxicology, inherited metabolic diseases
Skin biopsy for fibroblast culture	After discussion with Consultant Paediatrician		
Muscle biopsy if history suggestive of mitochondrial disorder	After discussion with Consultant Paediatrician		

GUIDANCE ON TAKING SAMPLES IMMEDIATELY AFTER THE SUDDEN UNEXPECTED DEATH OF AN OLDER CHILD

The following guidance on medical investigations following the death of an older child has been given by the Department of Histopathology, Great Ormond Street Children's Hospital and of the Department of Paediatric Metabolic Medicine, Guy's Hospital.

- Where there is any possibility of infection, the taking of samples shortly after death may improve the chances of growing the organism responsible. In these circumstances, blood cultures, throat and nose swabs should be taken routinely in the Accident and Emergency Department. CSF should be collected if the

clinical information suggests that meningitis is a possibility.

- Unless the death is clearly unnatural, full metabolic investigations are indicated.
- Always consider sending blood for toxicology

This is a basic checklist – please use clinical acumen to decide if other tests might be helpful (e.g. anti-convulsant level in a child with epilepsy, blood and urine ketones, HbA1c and accurate lab sugar in a child with diabetes)