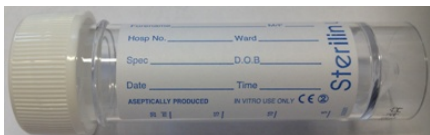




CSF Spectrophotometry

A protocol for collection, handling and transport of CSF requiring spectrophotometry for detection of bilirubin (xanthochromia) is available.

Synonyms	CSF xanthochromia
Clinical Indication	<p>The test is performed to try and identify patients who have had a subarachnoid haemorrhage (SAH) but in whom the CT scan is negative. After SAH, haemolysis of subarachnoid erythrocytes releases haemoglobin, which is converted to bilirubin. Bilirubin concentration reaches a maximum at about 48 hours and may last for 2 to 4 weeks after extensive bleeding. Because the formation of bilirubin after haemorrhage is a time-dependent process, CSF must be sampled at least 12 hours after a suspected event.</p> <p>The following must be indicated on the request form:</p> <ul style="list-style-type: none"> - Clinical indication for request - Result of CT scan - Time of onset of symptoms/event - Time of lumbar puncture - If the differential diagnosis includes meningitis
Part of Profile / See Also	
Request Form	Combined Pathology manual Blood form or ICE request
Availability / Frequency of Analysis	On request.
Turnaround Time	Within 24 hours
Patient Preparation	CSF must be sampled at least 12 hours after a suspected event.
Sample Requirements	
Specimen Type	<p>CSF collected sequentially (the first few ml. of fluid should not be used for this investigation). The first fraction should be collected into a grey top fluoride tube for glucose. CSF may also be required for microbiology and should be collected next (2nd and 3rd fractions into 2 white capped universals). The specimen for spectrophotometry should be the last fraction (4th) fraction taken. A blood sample (yellow top SST) should be taken at the same time for bilirubin, total protein and glucose.</p> <p>N.B. If only 3 CSF fractions can be collected then the last sample should be sent according to suspected diagnosis i.e. 'infection / meningitis' send to Microbiology, if 'SAH' send to Biochemistry.</p>
Volume	Minimum of 1 ml.
Container	 <p>White Capped Universal</p>
	Sample should be protected from light and transported to Clinical Biochemistry immediately. Do not use the pneumatic tube system.

Reference Range & Units

Interferences

**Interpretation & Clinical
Decision Value (if applicable)**

The report will consist of an interpretation:

Not consistent with SAH (low CSF bilirubin relative to serum)

Consistent with SAH or other source of CSF blood (increased CSF bilirubin relative to serum with normal CSF protein)

Consistent with SAH, other source of CSF blood or increased bilirubin accompanying increased CSF protein - interpret results with caution (increased CSF bilirubin relative to serum with increased CSF protein)

References

Test code

CSFB

Lab Handling

Centrifuge CSF sample as soon as possible after receipt and within 1 hour of collection. Store supernatant in the dark at -20°C.