

## PROTOCOL FOR COLLECTION OF ADULT CSF SAMPLES

**Xanthochromia** if SAH is suspected *and* CT negative *and* >12 hours after suspected event *and* <2 weeks after suspected event (*and* preferably >3 days after previous LP) request on a Biochemistry form; provide CT result, time of event, time of LP

**CSF samples** label with the patient's name, hospital number and date of birth, time of LP label plain samples ①, ② or ③ to indicate sequence of collection

grey-top tube 0.5 mL CSF (10 drops) for glucose, can be collected first

sample ① plain paediatric blood tube - at least 0.5 mL CSF (10 drops) for total protein

sample ② sterile Universal for microbiology investigations – at least 3 mL CSF (60 drops). Extra CSF may be needed for some additional tests (eg viral/TB investigations)

sample ③ plain paediatric blood tube – ideally at least 1.0 mL CSF (20 drops) for xanthochromia. Samples for xanthochromia must be protected from light.

**Blood samples** for total protein, bilirubin and glucose must be taken at the same time

**Transport** place microbiology CSF sample inside plastic specimen bag with microbiology request form

place all biochemistry CSF and blood samples inside plastic specimen bags with biochemistry request forms

samples for xanthochromia must be protected from light – use a brown envelope or a Xanthochromia Collection Kit box

all specimens must reach the lab for processing within 1 hour of collection

samples must not be sent by vacuum tube

all samples are analysed at WHH

K&CH and QEQMH –all samples must be sent to the local laboratory for sample preparation or packaging. Further details of transport arrangements from K&CH and QEQMH are detailed overleaf

**Telephone** xanthochromia – contact the biochemistry laboratory to ensure the sample is processed promptly. Discuss clinical questions with the duty biochemist on 723-6287 (via switchboard out-of-hours)

microbiology – out-of-hours contact the biomedical scientist on-call via switchboard

**Reporting** xanthochromia samples must be processed within 1 hour of collection

xanthochromia samples that arrive in the laboratory before 17:00 Monday to Friday or before 10:00 Saturday, Sunday and public holidays will be analysed the same day

xanthochromia samples arriving outside these hours will be analysed the following day. In exceptional clinical circumstances, they may be analysed the same day following agreement and discussion between Neurology and Biochemistry consultants and where laboratory resources permit

microbiology results will be available on patient Centre (preliminary results) or DART (authorised results) as soon as possible. Results will only be telephoned if clinically significant and could influence management of the patient.

**Xanthochromia Collection Kit boxes** containing one fluoride oxalate tube, two paediatric sample tubes, one Universal container, specimen bags and a copy of these instructions are supplied by Laboratory Medicine Reception on each site. A number are kept in the Emergency Department and will be returned after use. Please contact the appropriate pathology reception, on ext 723-8049 (WHH), 722-3176 (K&CH) or 725-4250 (QEQMH) or on-call biochemist, if replacement boxes are required.

## TRANSPORT ARRANGEMENTS FOR CSF SAMPLES FROM K&CH OR QEQMH

### CLINICAL STAFF:

At all times send all CSF samples to the laboratory at K&CH or QEQMH where they will be booked in, prepared for analysis and then transported to the WHH for analysis and interpretation.

#### Out-of-hours

#### **Biochemistry (17:00 – 09:00 Monday – Friday, 10:00 – 09:00 weekends and public holidays)**

Xanthochromia measurement is not routinely available out of hours. In exceptional clinical circumstances samples may be analysed the same day following agreement and discussion between Neurology and Biochemistry consultants and where laboratory resources permit. The on-call biochemist may be contacted via switchboard.

#### **Microbiology (17:00-08:00 Monday to Friday, anytime at weekends and public holidays)**

Collect the sample. Contact the on-call microbiology biomedical scientist via switchboard before sending the sample and request form to the laboratory. See the Microbiology User Guide on Sharepoint for more details).

### LABORATORY STAFF:

All CSF samples for xanthochromia must be centrifuged and separated as soon as possible.

**All samples received before 17:00 Monday to Friday, or 10:00 weekends and public holidays, must be sent to WHH for analysis the same day.** Outside these hours the separated CSF should be sent on the next available SERV transport unless urgent analysis has been agreed by the duty biochemist or on-call biochemist (DB) or microbiologist.

#### Transport arrangements

Monday – Friday 08:00 – 16:00	routine laboratory transport
Monday – Friday 16:00 – 17:00	taxi
Monday – Friday 17:00 – 19:00	next SERV run; taxi if urgent analysis agreed by DB/micro
Monday – Friday 06:00 – 08:00	next SERV run; taxi if urgent analysis agreed by DB/micro
All other times	next SERV run; urgent SERV if agreed by DB/micro