Figure S1.

**CSF from lumbar puncture**

2 tubes with 10 drops of CSF each (approx. 400µL)

Doctors should note exact time of sample, and blood glucose in patient notes

Tube no. 1

To microbiology lab immediately during normal hours*

Note exact time sample received in sample book

CSF sample

Note appearances clear, bloody, slightly cloudy and cloudy

**Centrifuge** at 3000 RPM for 10 mins (micro lab) or 6000 RPM for 5 mins (central lab)

Sediment

**Culture** by spreading 1 drop of sediment onto agar plates 1 - 4 as below

Note exact time cultures started in sample book

1. **Chocolate agar** (CA)

2. **Blood agar** (BA)

3. **MacConkey agar** (MAC)

Incubate plates

BA and MAC at 35-37°C for 3 days

CA at 35-37°C + 5% CO₂ for 7 days

Identity and sensitivity testing

of any bacteria grown

Report to doctor, record

Tube no. 2

To central lab

1. **Cell count**: pipette 5µL unspun CSF into the Neubauer chamber, count as below

2. **Fever study CSF**: save 150µL of unspun, unheated CSF for fever study. Label and freeze at -80°C

3. **Biochemistry**: analyse CSF glucose and CSF protein from supernatant (30 µL CSF)

4. **Antigen testing**: perform immediately if WCC>15/mm³ or if ordered (100 µL CSF)

Report to doctor, record