MANAGEMENT OF SUDDEN ONSET HEADACHE
RAH MEDICAL UNIT PROTOCOL

It is estimated that 1% of all headaches presenting to A&E will have had a subarachnoid haemorrhage (SAH). Patients who develop a sudden onset 'thunderclap' headache or headache developing over a few minutes are more likely to be positive. 10% of these patients will have had a SAH

Patients with headache and abnormal neurology, drowsiness or a period of unresponsiveness will naturally go on to have investigations. The diagnosis of SAH can be difficult in the patient with sudden onset headache who improves and has no abnormal neurology. A history of vomiting or headache in the past is not helpful in this situation nor is the absence of neck stiffness

Up to 50% of patients with SAH in the UK may receive the wrong diagnosis initially

Investigation of sudden onset or 'thunderclap' headache.

Who should be investigated?

All patients with headache developing over a few minutes who have no history of recurrent headaches or who have a 'thunderclap' type headache should be investigated.

The CT of brain is the first investigation of choice

The CT scan is 98-100% positive in the first 12 hours after a bleed. Many patients with a normal scan in the first 12 hours can be reassured. However, the positivity of CT scan diminishes with time. By day 7 only 50% of patients with SAH are positive.

Who needs a lumbar puncture?

Patients who have had a negative CT within 12 hours, but with a very high clinical suspicion of SAH.

Patients with a negative CT scan after 12 hours from onset

When should LP be done?

After 12 hours and up to 2 weeks after the event

Xanthochromia depends on the development of breakdown products of haemaglobin and bilirubin and can take 6-12 hours to develop. Xanthochromia will remain positive for up to two weeks

The CSF should be spun down immediately and analysed for xanthochromia, either by our biochemistry department or by spectrophotometry. This test is only available at the SGH during working hours.

Patient with negative CT and LP

Follow up of these patients show no long-term problems and they are safe to discharge with no follow up.