SUBARACHNOID HAEMORRHAGE (SAH)

You have been given this information leaflet because the doctor treating you thinks there may be a possibility that could have had a subarachnoid haemorrhage (SAH). Subarachnoid haemorrhage is usually diagnosed by finding blood in the brain on CT scan or in some cases when the scan is normal by going on to perform a Lumbar Puncture (inserting a needle into the back and sampling some of the fluid that surrounds the spinal cord).

The doctor treating you is arranging or already has arranged a CT scan and will want to discuss with you your options of whether to have a lumbar puncture performed or not. To help you make this decision you need to know a little bit about the potential diagnosis of subarachnoid haemorrhage and also what is involved in performing a lumbar puncture and the risks of this procedure. **To be clear, at present you do not have the diagnosis of subarachnoid haemorrhage it is only a possibility.**

What is subarachnoid haemorrhage (SAH)?

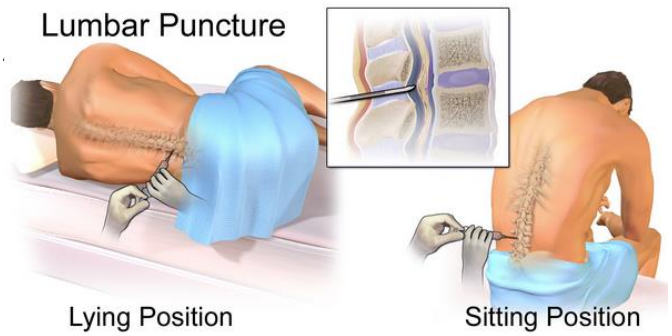
An SAH occurs when there is bleeding around the brain into the subarachnoid space. The bleeding usually comes from a burst (ruptured) berry aneurysm, most commonly at the back of the brain. Berry aneurysms are small berry-shaped swellings on the arteries which supply the brain, usually at a junction where an artery divides into two. These are relatively common in the general population, particularly in older patients, although most never rupture.

SAH can be catastrophic. Many people who have an SAH will die, sometimes before reaching hospital. Most others will be left with some degree of permanent disability. This is due to the damage caused to the brain by the initial bleeding and by the shortage of oxygen to the brain which follows it. About 1 in 4 people survive SAH well enough to live independently. This is more likely if the bleed is small, if initial symptoms are less severe and the patient is younger.

SAH is relatively rare, effecting 6-10 people in every 100,000 per year. 8 out of 10 cases of SAH are caused by the bursting (rupture) of berry aneurysms, the remaining causes are related to infection, brain tumours and abnormal blood vessels. Aneurysms may rupture in people with uncontrolled high blood pressure, high alcohol and recreational drug use.

The treatment for SAH is aimed at preventing further bleeding and brain injury by the use of blood pressure medicines and assessment by brain surgeons for procedures to block the aneurysm. Longer term management is aimed at reducing risk (stop smoking, treating high blood pressure) and rehabilitation for disability.

What is a Lumbar Puncture?



A lumbar puncture (sometimes called a spinal tap) is a procedure where a sample of cerebrospinal fluid (CSF) is taken for testing. CSF is the fluid that surrounds the brain (cerebrum) and spinal cord.

Usually, you lie on a couch on your side with your knees pulled up against your chest. Sometimes it is done with you sitting up and leaning forward on some pillows. The doctor will clean an area of your lower back with antiseptic. They will then inject some local anaesthetic into a small area of skin which lies over a space between two lower spinal bones (vertebrae). This stings a little at first but then makes the skin numb.

The doctor then pushes a needle through the skin and tissues between two vertebrae into the space around the spinal cord, which is filled with CSF. Because the skin is numbed with local anaesthetic, most people do not feel pain. You may feel pressure as the needle is pushed in. However, some people do have a sharp feeling in the back or leg when the needle is pushed through.

The lumbar puncture will not tell you whether you have an aneurysm only if one has bled. The risks or problems associated with having a lumbar puncture are discomfort despite the local anaesthetic, headache following the procedure and the small risks of other complications such as causing an infection which can be serious, and bleeding.

Your CT Scan Result

If your CT scan result is **positive** your doctor will tell you and arrange all the necessary treatments and referral for specialist opinion.

If your CT scan result is **negative** (no blood is seen on the scan) then your doctor will tell you the good news and discuss with you whether you want us to arrange a lumbar puncture for you or not.

A negative or normal CT scan means that we cannot with 100% certainty tell you that you have NOT had a subarachnoid haemorrhage, to do this a lumbar puncture would need to be performed. You need to balance the risks and discomfort of having a lumbar puncture against the possibility of you having had a SAH that has not shown up on the CT scan.

If the CT scan is normal then we are *at least* 98% confident that you have not had a SAH. However, we know that for patients like yourself who have had a normal CT scan then we would need to perform a lumbar puncture in 250 patients to find one true SAH. Furthermore, the lumbar puncture may identify what seems like a positive result but after further testing (which may be unnecessary and carry additional risks) turn out not to be a SAH. The risks and complications of lumbar puncture are described above.

Source - http://patient.info/health/subarachnoid-haemorrhage-leaflet http://patient.info/health/lumbar-puncture-leaflet - accessed May 2016 and others

Patient Experience

We know that being admitted to hospital can be a difficult and unsettling time for you and your loved ones. If you have any questions or concerns, please do speak with a member of staff on the ward or in the relevant department who will do their best to answer your questions and reassure you.

Feedback

Feedback is really important and useful to us – it can tell us where we are working well and where improvements can be made. There are lots of ways you can share your experience with us including completing our Friends and Family Test – cards are available and can be posted on all wards, departments and clinics at our hospitals. We value your comments and feedback and thank you for taking the time to share this with us.

Patient Advice and Liaison Service (PALS)

If you have any concerns or questions about your care, we advise you to talk with the nurse in charge or the department manager in the first instance as they are best placed to answer any questions or resolve concerns quickly. If the relevant member of staff is unable to help resolve your concern, you can contact the PALS Team. We offer informal help, advice or support about any aspect of hospital services & experiences.

Our PALS team will liaise with the various departments in our hospitals on your behalf, if you feel unable to do so, to resolve your problems and where appropriate refer to outside help.

If you are still unhappy you can contact the Complaints Department, who can investigate your concerns. You can make a complaint orally, electronically or in writing and we can advise and guide you through the complaints procedure.

How to contact PALS:

Telephone Patient Services: 0300 123 1732 or via email at: wah-tr.PALS@nhs.net

Opening times:

The PALS telephone lines are open Monday to Friday from 8.30am to 4.00pm. Please be aware that you may need to leave a voicemail message, but we aim to return your call within one working day.

If you are unable to understand this leaflet, please communicate with a member of staff.

For additional medical advice, if your symptoms or condition worsens:

Contact your GP

NHS 111:	Telephone 111
Get help with your symptoms, NHS111:	https://111.nhs.uk/
Information to help you manage your health:	www.nhs.uk

In an emergency telephone 999

Emergency Department (A&E)
Alexandra Hospital
Woodrow Drive
Redditch B98 7UB

Tel: 01527 512030

Minor Injury Unit
Kidderminster Hospital
Bewdley Road
Kidderminster DY11 6RJ

Tel: 01562 513039

Emergency Department (A&E)
Worcestershire Royal Hospital
Charles Hastings Way
Worcester WR5 1DD

Tel: 01905 760743