What happened today and why?

Any time we perform an epidural steroid injection, there is always the possibility of a complication called a “wet tap”. During your procedure, we are attempting to place the tip of the needle in a thin layer of fat called “epidural fat” (hence the name, epidural steroid injection). This layer of epidural fat is between 1mm and 5mm thick depending on the spinal level and the exact location of the needle insertion.

Just on the other side of the epidural fat is a cavity that is filled with spinal liquid along with thin nerves that are floating in the liquid. These nerves move freely within the liquid, and so, even if the needle tip enters this liquid, the nerves just move aside. This prevents the needle from piercing or damaging the nerves. However, when the needle enters, it makes a hole in the tissue layer that encases this liquid space.

During a typical injection, the tip of the needle remains in the epidural fat, and so no spinal liquid is seen coming out. However, if the needle is inserted just a few millimeters too far, it enters the spinal liquid, and a clear fluid is seen coming out of the needle. It looks like water coming out of a tap which is why we call this complication a “wet tap”. There can be several reasons why a wet tap occurs. Sometimes it is because the procedure was difficult due to bony narrowing from arthritis, or because the tissues have been made unusually complex due to previous surgery.

The hole made by the needle remains and small bits of spinal liquid continue to leak out into the surrounding area until the hole heals itself, usually in about 5 days or so. This leaking of fluid alters the pressure balance in the spinal liquid which travels all the way up the spine and surrounds the brain in the skull. The pressure changes are felt by the delicate tissues surrounding the brain and result in a headache. Since a spinal tap has caused the headache, we call this headache a “spinal headache”.

It is important for you to realize that a wet tap is not dangerous at all, but it can be an inconvenience. It may cause a headache for 3-5 days following the procedure. It may start right away, but more commonly it begins later the same night as the procedure or when you awake the next morning. It is almost always worse when you sit up or stand up, and relieved by laying down. Some patients will also get nausea, dizziness, a stiff neck, or even double vision, but again, remember, it is not dangerous and these symptoms will disappear when the headache is gone in a few days.

If you get what seems like a new and/or different headache for you, please call our office and we will review with you the steps that may make it feel better until it goes away on its own. We will also be available to answer any further questions you might have. The only thing that seems to help a spinal headache is laying down in bed and resting. Caffeine also seems to help relieve the symptoms a bit, and so you can try drinking caffeinated fluids or taking caffeine tablets. Excedrin contains aspirin along with caffeine and so this is another option to try.
The severity of a spinal headache varies from person to person. The tend to happen more often in women and they always effect younger patients the most. If you are over the age of 60, you stand a good chance of not even getting one, whereas if you are between the ages of 20 and 40, your chances are more like 50/50. We usually treat spinal headaches conservatively unless they are severe and completely interfering with your daily activities. This is especially true if you are very nauseated and unable to keep fluids down; if this is the case we need to know so that you do not get too dehydrated.

If you do get a severe headache, and even after 1-2 days of conservative treatment, you are still having difficulty eating, drinking, or taking care of your children, or if you have extremely important activities that cannot be avoided (work or school responsibilities), we can consider taking the headache away using a procedure called a “blood patch”. But remember, all procedures have potential complications, so we need to remember this when making the decision of whether to perform it or not.

A blood patch is a procedure where we collect some of your own blood and then inject it through a needle which is placed again into the epidural fat in the area of the hole made by the original needle. After injection, the blood “patches” the hole shut, stops the leakage of the fluid for 3-5 days. By the time the blood has been broken down by your body, the hole will have healed shut and the headache will not typically come back. A blood patch has a success rate of roughly 90%, and if a second one must be done, the success rate rises to above 95%.

The main complication of a blood patch is a pressure like sensation in the hips, upper legs, and sometimes the neck. This is caused by the pressure of the extra liquid that has been placed in the epidural space. Infection in the epidural space is an extremely rare complication. We may only see an epidural infection one time in a 30 year career, but it is not a complication that we can guarantee that you will not get.

If you need to contact Dr. Smith, you can call KOPI at 613-344-1202 and ask for extension 119. This will get you to Dr. Smith’s assistant Kerry. If you prefer using email, you can contact Dr. Smith and Kerry at drsmithfeedback@google.com.

As always, the doctors and staff at KOPI appreciate that you have trusted us with your body and we will do everything possible to make all of your procedures as smooth and anxiety free as possible. We are here to help!

Thank you,

Dr. Greg Murphy
Dr. David Smith
Dr. John Cain
Dr. Joe Quigg
Dr. George Kolbe
and the rest of the KOPI Pain Team