

Hampton Roads Radiology Associates

Patient Information

Radiological Directed Spine Biopsy

Your referring physician has requested a biopsy of a lesion in or around your spine. This procedure is typically performed in patients where there is a concern that cancer may have spread to the spine, developed in the spine or to look for infection. The following is a description of the procedure and the possible complications, so that you may give informed consent.

The biopsy will be performed with radiological guidance with either fluoroscopy (x-ray) or CT scanner. The lesion will be located with imaging and then a needle will be placed into the lesion to obtain a specimen. You will be given heavy IV sedation before and during the procedure and hopefully you will not remember much of it, but you will NOT be asleep. After the procedure, as long as there are no complications, you will be monitored for complications for a short time and then discharged to home with a driver.

This is a safe procedure and complications are uncommon, they include:

1. **BLEEDING.** Any needle procedure can lead to bleeding. Rarely, bleeding around the spine can compress the nerves or spinal cord and require emergency surgery.
2. **INFECTION.** Any needle through the skin can introduce infection. This is an extremely rare complication and sterile technique will be used.
3. **INJURY TO NERVES OR SPINAL CORD.** There are nerves and of course the spinal cord in the area, which can rarely be injured by the needle if it does not go where it is intended. A needle path least likely to cause such injury will be chosen.
4. **PNEUMOTHORAX.** In biopsies of the thoracic spine, the covering of the lung can be punctured by the needle which can cause air to leak out of the lung and collect around the lung causing collapse of the lung itself. A small tube might have to be placed to drain the air (chest tube) if this occurs to re-expand the lung. This might cause admission to the hospital overnight.
5. **NONDIAGNOSTIC BIOPSY.** This is not really a complication but is the most common problem with spine biopsies. If possible, a skinny needle will be placed into the lesion so that a very small amount can be removed that will be immediately looked at by a pathologist under a microscope.

They can then say that we will have enough material to have an answer. However, in lesions of the spine, this is often not possible. Core specimens with larger needles may have to be obtained. These specimens can not be immediately examined by a pathologist, so the tissue obtained might not be enough to give a diagnosis. We will not know this until the final pathology report days later, which may unfortunately lead to a repeat biopsy. Every attempt will be made to obtain adequate tissue for diagnosis.

If you have any questions, feel free to ask the physician performing the procedure prior to signing the consent.