Metastatic Disease of the Spine

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Transforming patient information into patient understanding.

Malignant tumors of the spine are not something that is often discussed and most patients would prefer not to think about. If you would prefer to not think about it or know anymore it’s OK. That is understandable. For all the patients that are seen with back pain somebody should be thinking about it so you can leave it up to me if you want to.

Metastatic means the tumor has come from somewhere else in the body and landed in the spine. The tumor cells most often end up in the main portion of the vertebra (the body) because of a unique vein structure around the vertebra that comes directly from the huge vena cava. Enough of the anatomy!

How Common Is It?

Metastatic spread of tumor cells to the vertebrae occurs in 50% of all patients with solid tumors. These are –

- Breast
- Lung
- Prostate
- Colon
- Thyroid
- Kidney

Often patients and the doctor do not know they have a primary tumor when it presents for the first time in the spine.

Pain as you might expect is the most common primary symptom. It seems to come from small fractures (cracks) in the vertebrae which are caused as the tumor weakens the bone. Typically there is no injury. The pain just happens from nowhere.

- Pain is usually constant
- Gradually worsens over time (days or weeks)
- Sitting or standing aggravates
- Lying down results in some relief
- Pain prevents sleep
- May be no arm or leg pain involvement unless a nerve root is involved

Evaluation

To make the diagnosis the doctor has to at least consider the possibility. That is where things often go off the track. The evaluation should always start with a careful examination including not just the back, but the hips and lower extremities too. Even before the exam the overall health history may give a clue.

Next, off to the x-ray department for plain x-rays. Sometimes we place a metal marker next to the tender area which helps identify the area of concern on the x-ray.

All too often nowadays the doctor omits the plain x-rays and goes straight to special test. Most Orthopaedic Surgeons think this is a bad idea and that plain x-rays of the spine in the area of concern should be primary.
Additional Imaging

Another valuable study that we often use after plain x-rays is a Technetium radioisotope bone scan because it evaluates the entire skeleton not only the spine. MRI and CT may also be used, but not for primary screening.

What Else?

There are several other important possible causes that we always need to consider that can act like metastatic disease.

- Degenerative arthritis
- Bone or disc space infection
- Multiple Myeloma
- Osteoporotic fracture
- Traumatic fracture

Treatment

The specific treatment of spinal tumors is a huge subject. Treatment at this point requires the expertise of an Orthopaedic Oncologist who practices in a larger center.

Depending on the tumor type the Oncologist might choose chemotherapy, hormone therapy or radiation therapy. Surgical treatment might be needed if the tumor affects the spinal cord or nerve roots.

While this is a somber subject it is a condition to be aware of.

*My patients put their trust in me and what I do improves the quality of their lives.*

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Besides what you read today there is a huge treasure trove of Orthopaedic and musculoskeletal information at [www.orthopodsurgeon.com](http://www.orthopodsurgeon.com). It contains the Website Library, Your Orthopaedic Connection and complete archive of every GCH article I have written.

I specialize in you. Be well.

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