

Spinal Infection

The vertebral column, intervertebral discs and the space surrounding the spinal cord can become infected in a number of different ways. The infection might be the result of fungal or bacterial organisms. Spinal infections can occur after a surgery or out of the blue in those who have certain risk factors. Common risk factors include poor nutrition, immune suppression, cancer, diabetes, human immunodeficiency virus and obesity.

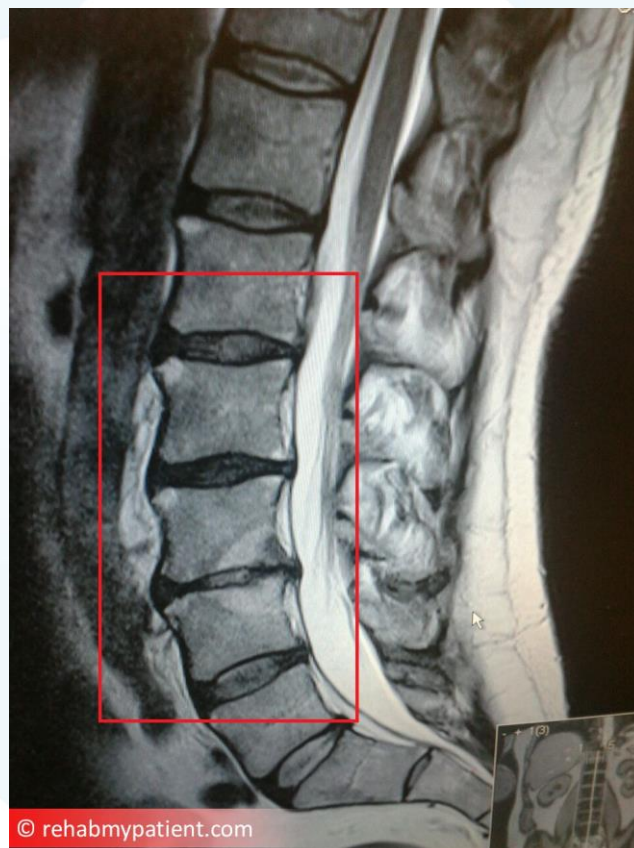
Risk factors include being in surgery for a long period of time, re-operations and instrumentation. Infections happen in as many as 4 percent of all surgical cases, despite taking a number of preventative measures. The chance of getting an infection tends to increase as you continue having multiple operations in the same area. Many infections occur within three days up to three months following the surgical procedure.

Spinal Infection Anatomy

The spine has a number of blocks that sit on top of each other, known as vertebrae. Each vertebra surrounds the spinal cord, and in-between the vertebra is the intervertebral discs. The discs are there to absorb forces, and to allow movement to the spine.

The infection can occur in the disc, around the spinal cord, and into the vertebrae.

Some new research suggests that the presence of modic changes which is an oedema or swelling seen in the vertebra surrounding a disc. Modic changes can be seen on MRI.



An MRI scan showing degenerative disc disease and modic changes (most notably at L3/4 around the back of the disc).

How to Treat Spinal Infections:

1. Antibiotics or Antifungal Medications

These types of medications are often taken orally or through an IV. Treatment often ranges from as short as 7-10 days, but it can take as long as 6-12 weeks to fully treat the infection. You might have to have a special line put in place for a longer round of antibiotics. This also allows you to administer the medication in the comfort of your own home with the help of a home health aide or visiting nurse. There is a new antibiotic therapy known as MAST therapy (modic antibiotic spinal therapy), although the efficacy of such treatment may not have been proven or validated.

Tips:

- For those who are overweight, try to lose the extra pounds to make sure you are at an adequate weight for your height and body frame.
- Do everything you can to make sure you are eating the right foods and maintaining a proper diet at all times. Proper nutrition can go a long way in ensuring your body stays healthy and disease free.
- For those who currently have diabetes, try to do what you can to keep your sugar levels under control to prevent any undue injuries from your body chemicals being out of whack.
- If you have other types of diseases and infections, the chance of you getting this type of infection is going to increase.
- After surgery, make sure you are doing everything you can to prevent an infection from setting in to the surgical site.
- Therapy may be useful if there is inflammation in the spine. Restoring range of movement to the spine, and using electrotherapy (such as ultrasound) to reduce inflammation may help.
- Acupuncture or electro-acupuncture could provide pain relief for spinal pain.