CONDITION

Diskitis

Diskitis is inflammation of a spinal disk, most often caused by an infection.

WHAT IT IS
Inflammation of a spinal disk, usually from infection

BODY SYSTEM
Bones, joints, and spine

MAIN SYMPTOMS
Localized back pain, stiffness, fever, trouble walking

WHAT CAUSES IT
Infection, usually bacteria

HOW IT IS DIAGNOSED
MRI, blood cultures, and sometimes a biopsy

MAIN TREATMENT
Antibiotics, pain management, and sometimes surgery

CAN IT BE CURED?
Yes - infection often clears with treatment

IS IT AN EMERGENCY?
Sometimes - weakness or bladder or bowel control loss

LONG-TERM OUTLOOK
Most recover; some have lasting pain or nerve damage

Overview

Diskitis is inflammation of one of the soft disks between the bones of the spine. These disks cushion the bones and help the spine move. Diskitis is usually caused by an infection.

In adults, infection often affects both the disk and nearby spinal bones. Bone infection is called osteomyelitis . Together, these problems may be called a spinal infection or spondylodiscitis.

Diskitis can occur anywhere in the spine but most often affects the lower back. Adults and children can develop it. Young children may show changes in walking or movement rather than describe back pain.

Without treatment, infection may damage the spine or spread into nearby tissues. Swelling or an abscess-a pocket of infected fluid-can press on the spinal cord or nerves. Early treatment reduces the risk of lasting problems.

Symptoms

Back or neck pain is the most common symptom. It is often focused over one area, becomes gradually more intense, and worsens with movement. Rest may provide little relief.

Possible symptoms include:

Fever is not always present, especially in older adults or people with weakened immune systems.

Babies and young children may be irritable or reluctant to sit, stand, crawl, or walk. A child may limp, refuse to bear weight, or have abdominal, hip, or back pain.

Symptoms may develop over days but often build over several weeks. Because ordinary back pain is common, diagnosis may be delayed.

- Persistent, localized back or neck pain
- Stiffness or reduced spinal movement
- Muscle spasms
- Fever, chills, or sweating
- Pain spreading into an arm, leg, chest, or abdomen
- Weakness, numbness, or tingling if nerves are affected

Causes and risk factors

Most cases are caused by bacteria. Staphylococcus aureus , commonly found on the skin, is a frequent cause. Less often, diskitis is linked to tuberculosis, fungi, or other organisms.

Infection usually reaches the spine through the bloodstream. It may begin in the skin, urinary tract, lungs, heart valves, or elsewhere, although the original source is not always found. Infection can also enter during spinal surgery, an injection, or another procedure.

Risk factors include:

Diskitis can occur without a known risk factor. A minor back injury does not usually cause the infection, although pain after an injury may draw attention to one already developing.

- A recent bloodstream or serious bacterial infection
- Recent spinal surgery, injection, or skin-breaking injury
- Diabetes

- Kidney failure or dialysis
- Medicines or conditions that weaken the immune system
- Injecting drugs
- Older age
- Tuberculosis exposure or past infection

Diagnosis

Symptoms alone cannot confirm diskitis. Muscle strain, arthritis, disk injury, fracture, and cancer can cause similar pain.

Assessment begins with a medical history and physical examination. The examination checks pain location, strength, sensation, reflexes, walking, and bladder or bowel function.

Blood tests may measure inflammatory markers called C-reactive protein and erythrocyte sedimentation rate. These often rise during infection but cannot confirm it. Blood cultures look for bacteria or fungi in the bloodstream.

Magnetic resonance imaging, or MRI, is usually the most useful scan because it shows the disks, bones, nerves, and surrounding tissues. Contrast material may be injected into a vein to make infection and abscesses easier to identify.

If MRI cannot be performed, computed tomography, or CT, may be considered. X-rays can show later changes but may appear normal early on.

If blood cultures do not identify the organism, a sample may be taken from the affected disk or bone with a CT-guided needle. It is tested for bacteria, fungi, tuberculosis, and other causes. When safe, collecting cultures before antibiotics like amoxicillin or doxycycline improves the chance of identifying the organism.

Treatment and management

Treatment depends on the organism, the area affected, and whether there is nerve pressure, an abscess, or spinal instability.

Bacterial diskitis is treated with antibiotics, commonly for several weeks. Treatment may begin through a vein, followed by suitable antibiotic tablets. Blood culture or biopsy results help the healthcare team choose targeted treatment.

Tuberculosis and fungal infections require different medicines and often longer treatment.

Antibiotics do not treat uncommon noninfectious causes of disk inflammation.

Hospital care may be needed for severe pain, bloodstream infection, neurological symptoms, or intravenous treatment. Other people can continue treatment at home with planned follow-up.

Pain relief can support sleep and movement. Selected people may use a brace to reduce painful movement or support the spine. Prolonged bed rest is generally avoided because it weakens muscles and increases blood clot risk. Physical therapy may begin as the infection settles.

Surgery may be considered for:

Surgery may drain infection, remove damaged tissue, relieve nerve pressure, or stabilize the spine.

- Pressure on the spinal cord or nerves
- Weakness or worsening neurological problems
- A large abscess requiring drainage
- Spinal instability or deformity
- Infection that persists despite appropriate treatment
- A need for tissue when less invasive testing has failed

Complications

Most people improve with treatment, but infection can damage nearby vertebrae and cause collapse, deformity, or instability.

An abscess may form beside the spine or in the epidural space between the spinal bones and the covering around the spinal cord. An epidural abscess can compress the spinal cord or nerves.

Possible complications include:

Severe or lasting nerve damage is less likely when nerve or spinal cord pressure is treated promptly.

- Long-term back pain or stiffness
- Spinal deformity or instability
- Nerve damage, weakness, or altered sensation

- Loss of bladder or bowel control
- Infection spreading into the bloodstream
- Infection returning after treatment

Prevention

Diskitis cannot always be prevented because infection may reach the spine without an obvious source.

Risk-reduction measures include caring for skin wounds, seeking treatment for significant infections, and following instructions after spinal procedures or surgery. Healthcare facilities use sterile techniques during procedures.

If you inject drugs, use sterile equipment and never share needles. Support is available if you want help reducing or stopping drug use.

Managing diabetes and other long-term conditions may also help the body respond to infection, although these steps cannot guarantee prevention.

Living with it and what to expect

Recovery usually takes weeks or months. Pain may improve after treatment starts, but stiffness, tiredness, and reduced activity can continue after the infection is controlled.

Follow-up commonly includes symptom reviews, physical examinations, and blood tests for inflammation. Another MRI may be needed if symptoms worsen or improvement is slower than expected. MRI changes can remain after infection improves, so scans are considered alongside symptoms and blood tests.

Complete the planned treatment unless your treating team changes it. Stopping antibiotics early or repeatedly missing doses may allow infection to return. Report side effects, difficulty taking medicine, or intravenous treatment problems rather than stopping treatment without advice.

Activity usually increases gradually according to pain, spinal stability, nerve function, and whether surgery was needed. Physical therapy can rebuild strength, movement, and balance. Temporary work changes may be needed for lifting, driving, or prolonged sitting.

Many people recover without major limitations. Some have lasting pain or restricted movement because of disk and bone damage. A smaller group has ongoing nerve problems or needs continued spinal care.

When to get medical help

Arrange prompt medical assessment for severe or persistent pain focused in one part of the back or neck, especially with fever, chills, night sweats, or unexplained illness.

Prompt assessment is also important for new back pain after a bloodstream infection, spinal procedure, surgery, or injection, or if you have a weakened immune system or inject drugs. A child who suddenly refuses to walk, sit, crawl, or bear weight should be assessed.

Seek emergency help for:

If diskitis has been diagnosed, keep routine follow-up appointments even when you feel better. Contact the treating service if fever returns, pain steadily worsens, medicine cannot be taken, or an intravenous line becomes red, painful, swollen, or starts leaking.

- New or rapidly worsening arm or leg weakness
- Numbness around the buttocks, genitals, or inner thighs
- New loss of bladder or bowel control
- Inability to pass urine
- Severe back pain with confusion, faintness, or breathing difficulty
- Rapidly worsening symptoms during treatment

Common questions

Is diskitis the same as a slipped disk?

No. A slipped or herniated disk occurs when disk material pushes outward and may irritate a nerve. Diskitis is disk inflammation, usually caused by infection. They require different treatments.

Can diskitis be cured completely?

Treatment clears the infection in many people. Structural damage to the disk or nearby bone may leave pain or stiffness, particularly if nerves were affected.

How long does recovery take?

Antibiotics usually continue for several weeks, while strength and movement may take months to recover. Surgery, extensive bone damage, an abscess, or nerve injury may lengthen recovery.

Is diskitis contagious?

Diskitis itself is not usually passed between people. Some causes, such as tuberculosis, can spread in other ways. Precautions depend on the specific organism.

Can I walk or exercise with diskitis?

Movement is usually increased gradually as pain and infection improve. A brace or temporary limits on lifting and bending may be needed. Safe activity depends on spinal stability, nerve symptoms, and any surgery.

Does diskitis always cause a fever?

No. Many people with spinal infection have no noticeable fever. Diagnosis considers pain, risk factors, examination findings, blood tests, and imaging together.

Sources

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