



Dr Wolfgang Muller (Consultant Paediatrician)

Parent Information Guide: Bertolotti Syndrome

What is Bertolotti Syndrome?

Bertolotti syndrome is a condition that causes **chronic lower back pain** due to a bone abnormality where the **lowest lumbar vertebra (L5)** forms an unusual connection to the **sacrum or pelvic bone**.

This extra connection, known as a **lumbosacral transitional vertebra (LSTV)**, may lead to pain by changing the way the spine moves, putting strain on nearby muscles, joints, or nerves.

What Are the Symptoms?

- Ongoing **low back pain**, especially near the waistline
 - Pain may worsen with sitting, bending, or physical activity
 - **Buttock or leg pain** if nearby nerves are irritated
 - Pain that often starts in **teenage years or early adulthood**
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What Causes It?

Bertolotti syndrome is caused by a **congenital (present from birth)** variation in the spine. It is not caused by an injury or illness, but can lead to problems later in life due to the extra stress on nearby joints and tissues.

How is it Diagnosed?

Doctors may use:

- **X-rays** to spot the abnormal bone connection
 - **MRI or CT scans** to look at spinal structures and nerves
 - A **diagnostic injection** to see if the pain improves when the area is numbed
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How is it Treated?

Most people with Bertolotti syndrome can manage it with **non-surgical treatments**:

- ✓ **Physiotherapy** – to strengthen the muscles that support your back and improve posture
- ✓ **Pain relief** – using medications such as paracetamol, ibuprofen, or muscle relaxants
- ✓ **Injections** – steroid or numbing injections may help reduce pain in the affected area

Is Surgery Needed?

Surgery is **rarely required**. It may be considered if:

- Pain is severe and long-lasting
- Conservative treatments haven't helped
- There is nerve compression

Surgical options include removing the abnormal bone connection or spinal fusion in selected cases.

Living with Bertolotti Syndrome

- Many people manage symptoms well with regular physiotherapy and lifestyle changes
- Try to avoid long periods of sitting or heavy lifting
- Stay active with gentle exercise to keep the spine mobile and strong

When to See a Doctor

- If back pain is **persistent or worsening**
- If pain radiates to your **legs or causes numbness**
- If it affects your daily activities or sleep

Bertolotti syndrome is manageable with the right support. If you're concerned, speak to your GP or physiotherapist for advice and treatment options.

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Date: 19/04/2025