

OPLL — Ossification of the Posterior Longitudinal Ligament

OPLL means ossification of the posterior longitudinal ligament — a ligament at the back of the vertebral bodies, inside the spinal canal, gradually turning to bone. As it thickens it can narrow the canal and press on the spinal cord or nerves, most often in the neck. It is often silent and harmless, but where it presses on the cord it deserves careful attention.

THE BIG PICTURE

Often silent, occasionally important

Most OPLL is found by chance and never causes symptoms; many people never have trouble from it. It is much more common in people of East Asian background, affects men more often, and appears from middle age. A particular risk is sudden deterioration after even a minor fall, because the cord may already be compressed.

IN PLAIN TERMS

OPLL is when a ligament at the back of the vertebrae slowly turns to bone. It is often harmless and silent, but if it grows enough to press on the spinal cord it can cause problems with the hands, balance and walking.

1 Symptoms

- Often none — found incidentally on a scan.
- Cervical myelopathy (cord pressure): clumsy or numb hands, loss of fine finger skills, unsteadiness, and balance or walking problems; in advanced cases, bladder or bowel disturbance.
- Sometimes arm pain or weakness (a trapped nerve), or neck pain and stiffness.

SEEK URGENT REVIEW IF YOU NOTICE

Progressive clumsy hands, unsteadiness or walking difficulty, or any bladder or bowel disturbance — and ESPECIALLY any sudden neurological change after a fall or minor injury, which can cause a sudden cord injury.

2 How it is assessed

A **CT** scan is the best test to show the ossified ligament in detail — its extent, type and how much of the canal it occupies. An **MRI** shows the spinal cord and any compression or cord change. The two are usually used together to diagnose and to plan any surgery.

REASSURANCE

Most people with OPLL are simply monitored, with advice to avoid falls, and never need surgery. In long-term studies, only a minority of those without myelopathy went on to develop it.

3 Treatment

For silent or mild OPLL: observation, neck-pain management, and falls-prevention advice. No medicine dissolves the ossified ligament. Surgery is for significant or progressive myelopathy, to take pressure off the

cord — either enlarging the canal from the back of the neck (laminoplasty/laminectomy) so the cord drifts back, or removing the ligament from the front, depending on the anatomy and the K-line. In well-selected patients results are generally good, though long-standing cord damage may not fully recover.

THE KEY MESSAGE

OPLL is the gradual turning-to-bone of a ligament at the back of the vertebrae, most often in the neck, where it can press on the spinal cord. It is frequently silent and never causes trouble in many people. When it causes myelopathy — clumsy hands, unsteadiness, walking problems — it needs assessment with CT and MRI. Most are monitored with falls-precautions; surgery is reserved for significant or progressive myelopathy. Act urgently on any sudden change after a fall.

A NOTE BEFORE YOU START

This information is for general education and does not replace the advice of your clinical team. Please use it to ask better questions, not to make decisions on your own.

READ MORE & GET IN TOUCH

For more on this and other spinal conditions, visit **MohammedMadi.com**.

Mr Mohammed Madi · Consultant Orthopaedic & Spinal Surgeon