

oatley physiotherapy & sports injury centre

FACT SHEET

LOWER BACK PAIN IN THE YOUNG FAST BOWLER

Fast bowling in cricket places incredible strain on the lumbar spine, with some studies reporting forces **8 – 10 times body weight** being transmitted through the body when landing the front foot. This force loading combined with **repetitive lumbar spine extension and rotation** results in there being a high prevalence (estimated **up to 67%**) of stress fractures of the **pars interarticularis** (Johnson M, Ferreira M, Hush J., 2012).

PARS INTERARTICULARIS STRESS FRACTURES

Signs and symptoms

- **Unilateral** lower back ache, opposite to the bowling arm
- Pain aggravated by **extension** activities without a precipitating event
- Reproduction of pain with combined extension and rotation while standing on the affected leg
- **Tenderness** on palpation over the fracture site

Imaging

If a stress fracture is clinically suggested, a bone scan, CT or MRI scan can confirm the area of injury. X-rays are often not effective in detecting bony stress injuries.



Treatment

Rest from the **aggravating activity** and sport is of utmost importance to allow the fracture to heal. A **physiotherapy program** focussing on **stretching and core strengthening** is essential to ensure the athlete is prepared to return to sport when clinically indicated.

The majority of stress fractures will take at least **6 weeks** to recover, which is clinically decided when combined extension and rotation are **pain-free** and there is **no local tenderness**.

Returning to sport

Once the fracture has healed, there should be a **gradual** return to bowling with loading **monitored closely**. Net bowling must be pain-free prior to returning to a match situation. This will likely take a period of a further 4-6 weeks if there is no complication.

During this stage, **bowling technique** should be reviewed and **corrected** as necessary. A 'mixed action' technique is more likely to cause stress injuries than either the 'side-on' or 'front-on' techniques. Communication with coaching staff may be necessary for this to be achieved.

If you should have any questions regarding this or any other similar injuries, please contact us on 9585 8392 or oatleyphysiotherapy@bigpond.com.

If you would like to go onto our electronic mailing list to periodically receive further fact sheets, please let us know.



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