# A 28-year-old kitchen hand with acute low back pain

Commentary by **HEDLEY GRIFFITHS** MB BS, FRACP

**Which conditions should be excluded in this patient, and what is the best approach to management?**

## Case scenario

A 28-year-old female hospital kitchen hand presents to the staff doctor with a one-week history of low back pain. There is no previous history of backache or trauma. Examination reveals tenderness over the sacroiliac joints but no neurological signs. Forward flexion is limited by pain.

What course of action and reassurance can we give to this worker?

## Commentary

The overall approach to this young woman with her first ever episode of significant back pain should be one of reassurance.

The spontaneous onset of the back pain does not help differentiate the cause for her back pain. The prevalence of the back pain in the general community is similar in those involved in physically arduous jobs as in those in sedentary occupations.

The patient's young age means that osteoporotic fractures are unlikely, as are malignancies. Her age may, on the other hand, indicate an increased likelihood of inflammatory back pain such as a spondylarthropathy; however, this is statistically unlikely because idiopathic back pain is so common whereas spondylarthropathy is quite uncommon.

Her female gender, the lack of early morning stiffness, and the absence of the rest pain at night would argue against a condition such as sacroileitis or ankylosing spondylitis.

In taking a history, one would need to rule out any constitutional disturbance that might indicate the presence of infection in the kidneys for instance, or the spine. Any history of drug abuse could suggest the possibility of an atypical infection. If there was any suggestion of abdominal or pelvic pain, intra-abdominal pathology such as pelvic inflammatory disease or endometriosis needs to be considered.

### Eliminate red flag conditions

The examination is done largely to rule out 'red flag conditions', such as fracture, malignancy, infection and inflammatory arthropathy. Tenderness over the sacroiliac joints is a nonspecific finding, and even in the presence of sacroileitis, it may not be a helpful diagnostic test. The absence of neurological deficits is reassuring, and the absence of radicular pain or dysaesthesia helps exclude a significant disc prolapse. The limitation in range of movement again is a nonspecific finding, and certainly in the early stages of an acute episode of back pain, muscle spasm can cause severe restriction.

Throughout the consultation, it is important to remember that in 95% of people with back pain, it will not be possible to make a specific diagnosis. Even with the powerful imaging techniques available today, such as bone scans, CT scans and MRI scans, our diagnostic ability has not really improved.

### Provide reassurance

After taking a full history and performing a comprehensive examination, if it is clear that there are no indicators of serious underlying pathology, it is important to reassure this young woman that she is likely to get better within a few weeks, regardless of what treatment is offered.

To bolster the patient's confidence, and a sense of autonomy and control, encourage a sensible exercise program such as hydrotherapy, yoga or tai chi. In general, impact sports such as jogging or running have the potential to exacerbate acute back pain. However, once the pain has settled, such activities are quite important to maintain aerobic fitness and muscle tone, thereby minimising recurrences of back pain in the future.

Regarding work-related activities, it is most beneficial to the patient if she can remain in the workforce in a capacity that does not significantly aggravate the pain. Commonsense limitations such as avoiding heavy lifting or prolonged bending are about as restrictive as one should go.

Medications such as NSAIDs and simple analgesics have a limited role. The evidence for physical interventions such as manipulation and physiotherapy is not strong, but does favour their use in some situations.

If there has been no improvement over the next four to six weeks, an argument for at least a plain x-ray is reasonable. CT and MRI scans should generally be reserved as preoperative manoeuvres, or to exclude 'red flag conditions'.

### Conclusion

This young woman should leave the consultation feeling confident that: she does not have a crippling or serious condition; in general she can control her symptoms herself; and she is her own best therapist.

She should be reminded to return for review if the pain does not settle. MT

Dr Griffiths is a Consultant Physician and Rheumatologist at Geelong Hospital, and in private practice at Geelong, Ballarat and Warnambool, Vic.

DECLARATION OF INTEREST: None.