

## **Appendix 1 (as supplied by the authors): What should I advise my patient?**

### *A patient with acute non-specific low back pain*

“Acute low back pain recovers quickly – most people are substantially better or fully recovered in 2 weeks, although it is common for the pain recur. Because it recovers so well on its own, a lot of the treatments out there for low back pain – including drugs and non-drug options such as massage, don’t add any benefit beyond simply waiting for the pain to go away on its own. I’m not concerned that you have any of the serious causes of low back pain, so there is no need for any X-Rays or scans at this stage. In fact, imaging shows changes that occur with age, even in people without back pain so the findings are not that helpful. For now I’d suggest you stay as active as you can. To help with the pain you could try heat packs or some anti-inflammatory medication [may not be suitable for everyone]. We can reassess the need for medicines or other therapies at our review within the next week or two [mutually decided with the patient]. How do you feel about that approach?”

### *A patient with persistent low back pain without clinical features of serious pathology*

“Persistent low back pain is not necessarily related to ongoing injury. It is caused by a combination of signals coming from sensitive back structures as well as from your brain and nervous system which are set up to protect your back. It is unlikely that we will see the exact cause of your pain even using the best imaging technology such as magnetic resonance imaging. Another problem with imaging is that it shows things that seem abnormal but are unrelated to the pain, so there is no gain in us pursuing that at the moment. Nowadays non-drug options are preferred over medications to manage back pain that is persisting. Non-drug options – things like spinal manipulation, massage, exercise

programs, and psychological approaches -- have effects on pain that are similar to most medications but with fewer side effects. How would you feel if we started on one of those approaches?/How would you feel if we tried to replace some of the medicine you are taking with a non-medicine approach? We can always discuss your medicine options at our review within the next 2-4 weeks [mutually decided with the patient].”

*A patient with new onset of radicular pain without neurological signs*

“The pain going down your leg suggests the pain may be coming from a nerve in your spine. This is called radicular pain – some people call it “sciatica” – but it is not actually a problem with your sciatic nerve. Radicular pain is thought to involve irritation or compression of one or more nerves in your spine. A common cause is a bulging disc; this can resolve over time. It is safe to move despite the pain; and staying active may be helpful. Some people ask about X-Rays or scans, but because a lot of people with radicular pain improve rapidly, there is no gain in us pursuing imaging right now. If we need to we can reassess the need for imaging at our review. We’d only pursue imaging if your pain persisted or you developed worsening pain or signs of pressure on the nerves in your back that might indicate the need for surgery. Surgery can reduce pain more quickly than non-operative management but it doesn’t have any long-term benefits. I would recommend you try some gentle exercise to keep you from stiffening up and we will monitor your progress closely. We could try a short-course of anti-inflammatory drugs [may not be suitable for everyone] – these drugs help a little bit with low back pain but have not been tested for radicular pain. They also have side effects. Unfortunately most of the available medicines for radicular pain including drugs for nerve pain and opioids have been shown to be ineffective and they

all have side effects, so I wouldn't recommend those. If the pain becomes unbearable we can discuss other options at our review. How would you feel about that approach?"

*A patient with new onset of neurogenic claudication without neurological signs:*

"The pain down your buttocks/thighs/legs that comes on with walking and is relieved by leaning forwards or by sitting down for a rest is called neurogenic claudication. It is caused by a narrowing of the spinal canal. It is commonly due to being born with a small spinal canal that becomes more narrowed with age as the joints and ligaments in your spine enlarge. It is safe to move despite the pain and it is good to try to stay active even if you have to rest when the pain comes on. Some people ask about X-Rays or scans, but at the moment there is no gain in us pursuing those kinds of tests. If we need to we can reassess the need for imaging at our review. We'd only pursue imaging if your pain failed to improve or you developed worsening pain or signs that might indicate the need for surgery. I would recommend you try some gentle exercises to improve your mobility and I will monitor you closely. How would you feel about that approach?"