Figure 2A: Acute episode of rowing-related low back pain: progression through phases from initial presentation to full return to sport

Initial triage - first Presentation

Early presentation to Physiotherapist OR Doctor with rowing knowledge
Establish:
History including past history
Pain behaviour & aggravators
Risk factors
What are modifiable & non-modifiable risk factors?
Examine:
Pain response to spine movement
If shooting pain, numbness or loss of muscle strength - specific tests
Signs for further medical referral
Involvement of nerves
Signs of other medical condition
Signs for concern & support
Catastrophising, anxiety, upcoming performance event, life stress or known mental illness
Consider psychology referral
Progress to acute OR refer

Acute phase - first week

Ensure you have a follow up review with Physiotherapist and / or Doctor
Establish:
Improvement in significant findings from initial triage
Ability to complete daily activities
Sitting tolerance
Examine:
Pain response to spine movement
Rowing specific motion of the hips & flexibility of hamstrings
Progression Criteria:
+ve response to activity & training modifications
Decreased symptoms in daily activities & sitting tolerance
Rower expressing confidence in their improvement of function
Progress to sub-acute before end of first week if criteria met
Progress to sub-acute OR refer

Sub-acute phase - week two onwards

Continue Physiotherapy and / or Doctor follow up
Establish:
Continued reassessment of sitting tolerance, daily activities & pain as erg or on-water rowing introduced
Examine:
Ability to move through rowing specific motion & ability to tolerate spinal load
Response to trial ergo row with assessment before & after & / or
Response to short duration on-water row
Biomechanical or technical assessment to identify & address modifiable risk factors
Progression Criteria:
Decreased: medication use with reduction in symptoms; morning stiffness; pain reponse to rowing
Low levels of pain tolerable BUT
No tolerance for pain getting increasingly worse when rowing OR pain immediately after rowing
Maintenance or improvement of rowing specific movement
Rowers’ confidence to progress
Progress to rehabilitation OR
Regression: reassess as per triage & acute

Rehabilitation to full return to sport

Continue Physiotherapy and / or Doctor follow up
Establish:
Ability of rower to progressively increase training load with no pain during or after rowing
No pain during cross-training or daily activities
Examine:
Factors highlighted in initial triage, reassess for signs of resolution
Progression to full training & competition if able to:
Row with usual power as rowing training load increases
Tolerate changes in: water & weather conditions; rowing rate; seating position in boat
Athletes with ongoing signs of nerve involvement OR slow progress OR sustained symptoms without significant improvement in function should not be progressed to this stage
Referral should be considered
Progress to performance OR
Regression: reassess as per triage, acute & sub-acute

Time from initial triage to return to sport is variable – minor episodes last a few days & up to 3 weeks, significant episodes last 3-12 weeks