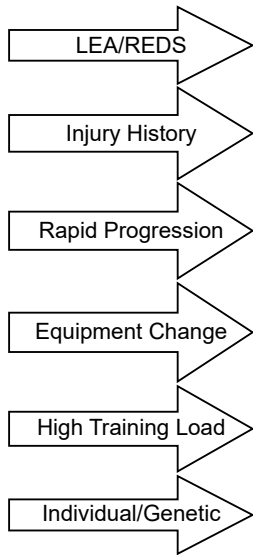


RIB STRESS INJURIES ARE MULTIFACTORIAL



RIB STRESS INJURY COMMON SYMPTOMS

Pain in the chest wall area from any of:

- Coughing
- Sneezing
- Breathing deeply
- Pulling or pushing doors
- Side-sleeping
- Doing pushups or abdominal exercise such as situps
- Erging and/or rowing, or just after erging/rowing

Pain often begins gradually and is ignored or minimized by the rower/coach as being too minor to require modifying training.

Early detection and rapid offloading of the chest wall is key to minimizing lost training time and long-term impact from injury.

RIB STRESS INJURY ASSESSMENT

RSI is far more common in rowers than general population. Medical professionals who don't know rowing often don't diagnose chest wall pain as RSI, leading to delay in healing.

Signs and symptoms of RSI include:

- Chest wall pain at rest/overnight
- Point tenderness of 1-3 ribs
- Pain located away from costochondral joints (sternum)
- Pain reproduced with rib cage squeeze
- Persistent pain despite 5 days of rest from rib cage loading (eg. erg, row, strength, etc.)

Confirm RSI diagnosis using a bone scan, ultrasound, or MRI. X-rays are not sensitive enough to rule out RSI.

REASSESS FOR RETURN-TO-TRAIN

The RSI may take 2-10 weeks to heal depending on severity, how quickly we caught the injury and offloaded the rib, and individual recovery factors and performance goals.

The return timeline should be approximately 1:1 time spent offloaded/modified to time gradually returning to full erging/rowing. Eg. 6 weeks offloaded = 6 weeks returning.

Readiness to begin return-to-train depends primarily on symptoms. The athlete should experience little to no pain in the injured area to resume gradual reloading.

We typically do not need repeated imaging before return due to lag in visual indication of bone healing.

OFFLOAD WHILE HEALING

Preserve fitness, strength, and muscle mass as much as possible without interfering with the healing process.

Pain-free aerobic cross-training:

- Stationary cycling is typically best
- May need arm-support
- May need to be LISS-only

Pain-free strength training:

- Lower body strength, no torso load:
 - Single-leg squat variations
 - Nordic hamstring curl and/or glute-ham raise
 - Belt squat and/or leg press
- Light upper body strength training only if truly pain-free:
 - Elevated pushup
 - High-handle bodyweight row
 - Low-load shoulder exercises

IMMEDIATE CARE AND PAIN RELIEF

Gentle, unloaded movement can be helpful to alleviate feelings of stiffness.

RSI is a bone injury, so there is little active work that we can do to hasten healing. Adding bone stress via stretching, exercise, foam rolling, massage, and other direct interventions can delay healing.

A physician may recommend medications to help with symptoms. The rower should not rely on this to facilitate training instead of healing.

Use the immediate 2-6 weeks of early healing time to address any potential contributing causes of RSI including REDS, vitamin deficiencies, training-related issues, and movement dysfunction or muscle imbalance.

RETURNING TO TRAINING

Gradual return-to-train is key to avoid RSI recurrence or injury elsewhere (commonly low back).

This time allows for bone remodeling AND improving erging/rowing technique to avoid future injury.

Long-term or permanent training modifications may be necessary.

See the "Rowing Return-to-Train" RowingStronger.com article for full details on the NSCA 50/30/20/10 volume progression.

Basic progression based on pre-injury row/erg minutes/meters, low intensity zone only:

- Week 1: 50% row/erg, 50% x-train
- Week 2: 70% row/erg, 30% x-train
- Week 3: 80% row/erg, 20% x-train
- Week 4: 90% row/erg, 10% x-train
- Week 5: 100% row/erg, + short intensity

READ MORE

www.RowingStronger.com

"Rowing Injuries: Understanding, Preventing, Managing"