

CHEST WALL PAIN

FIRST AID FOR COACHES & ATHLETES

WHAT IS IT?

PAIN IN THE RIB REGION, BETWEEN THE THORACIC SPINE AND STERNUM (BREAST BONE) IS CONSIDERED TO BE CHEST WALL PAIN. THERE ARE MULTIPLE CAUSES OF PAIN IN THIS REGION IN THE ROWER, WITH THE MOST CONCERNING BEING A BONY INJURY TO THE RIB, OR INFLAMMATION IN ONE OF THE JOINTS OF THE THORACIC SPINE OR WHERE THE RIB JOINS THE THORACIC SPINE.

WHAT WILL THE ATHLETE REPORT:

PAIN ON THE FRONT, SIDE OR BACK OF THE CHEST WALL. CAN BE AGGRAVATED BY BREATHING, LYING ON THAT SIDE, DOING A SIT UP OR PUSH UP, ROWING OR UPPER BODY EXERCISES IN THE GYM SUCH AS BENCH PULL OR PRESS. SITTING CAN AGGRAVATE THE THORACIC SPINE IF POOR POSTURE IS HELD. ROTATION OR TWISTING OF THE THORACIC SPINE MAY CAUSE PAIN. THERE MAYBE A HARD TO PINPOINT ACHE IN THE REGION, PAIN CAN TROUBLE THE ATHLETE AT NIGHT

WHAT CONTRIBUTES TO IT - RIB BONE STRESS REACTION OR FRACTURE?

THERE ARE TWO CELLS IN THE BONE THAT ARE RESPONSIBLE FOR REMODELLING OF THE RIB STRUCTURE IN RESPONSE TO LOAD (ROWING). PAC MAN (OSTEOCLAST) BREAKS DOWN OLD BONE IN PREPARATION FOR THE FORMATION OF NEW BONE. BOB THE BUILDER (OSTEOBLAST) FORMS NEW BONE THAT IS MORE ABLE TO RESIST THE LOAD OF ROWING. A STRESS REACTION IS A SMALL GAP BETWEEN PAC MAN & BOB THE BUILDER AND A FRACTURE A BIGGER GAP.

CAUSATIVE FACTORS: PAC MAN ONLY RESPONDS TO LOAD – THE MORE LOAD, OR THE GREATER THE RATE OF INCREASE IN LOAD THE FASTER PAC MAN BREAKS DOWN OLD BONE. BOB THE BUILDER REQUIRES MANY THINGS IN HIS TOOL KIT TO BUILD STRONG BONE, INCLUDING: SUFFICIENT ENERGY, HORMONES, VITAMIN D AND CALCIUM. A GAP BETWEEN THE TWO CELLS CAN BE FORMED BY OVER STIMULATION OF PAC MAN OR A SLOW BUILDING RESPONSE BY BOB DUE TO THINGS MISSING FROM HIS TOOLBOX. THIS IS A COMPLEX INTERPLAY.

WHAT CONTRIBUTES TO IT - THORACIC SPINE PAIN

STIFFNESS OR INCREASED MOVEMENT OF THE SMALL JOINTS OF THE THORACIC SPINE CONNECTING EACH VERTEBRAE OR THE RIB TO THE VERTEBRAE CAN BE INCREASED BY ATYPICAL MOVEMENT PATTERNS SUCH AS CHOPPY WATER OR AN UNSTABLE PLATFORM. PROLONGED SITTING CAN ALSO CAUSE A THORACIC KYPHOTIC POSITION (SLUMP) INCREASING THE STIFFNESS OF THIS REGION.

ROWING FIRST AID

ANY ATHLETE WITH CHEST WALL PAIN SHOULD BE REMOVED FROM ON WATER, ERGO TRAINING & UPPER BODY WEIGHTS UNTIL THEY CAN BE ASSESSED BY A ROWING AUSTRALIA PREFERRED PROVIDER

ATHLETES CAN PREVENT THORACIC SPINE PAIN BY MAINTAINING FLEXIBILITY OF THE SPINE & SURROUNDING MUSCLES.

A THOROUGH WARM UP CAN ASSIST WITH MAINTAINING THORACIC SPINE MOTION OFTEN ATHLETES WITH STIFFNESS, LEADING TO PAIN IN THE THORACIC SPINE CAN BE RETURNED TO TRAINING QUICKLY WITH MANUAL THERAPY, SELF MANAGEMENT TECHNIQUES, INCLUDING STRETCHING AND SIMPLE ANALGESIA

ATHLETES WITH RIB BONY INJURIES REQUIRE A NUMBER OF WEEKS OUT OF THE BOAT AND THIS PROCESS OF INVESTIGATION AND MANAGEMENT SHOULD BE GUIDED BY BOTH A DOCTOR AND PHYSIOTHERAPIST EXPERIENCED IN ROWING.

[HTTP://WWW.ROWINGAUSTRALIA.COM.AU/COMMUNITY-ROWING/SPORTS-MEDICINE/](http://www.rowingaustralia.com.au/community-rowing/sports-medicine/)