

Right Intercostal Pain

Initial Visit

Subjective:

Patient is a 35-year old male who presents to physical therapy with right rib and low back discomfort. He reports his onset of symptoms occurred while golfing two years ago. He states that after swinging his golf club his hips locked and he felt a sharp pain in his right ribs. Patient reports that various twisting and weight lifting activities increase his symptoms and he has been unable to golf since the incident. Patient was a former division I collegiate baseball player and currently is employed as a broker.

Past Medical History:

Patient reports no significant past medical history.

Objective:

	Left	Right
Adduction Drop Test	+	+
Extension Drop Test	+	+
SLR	70°	70°
Leg Rotation	Limited	Limited (increased intercostal pain)
FA IR	20°	17°
FA IR Strength	4/5	4/5
FA ER	28°	30°
FA ER Strength	4/5	4/5
Hruska Adduction Lift Test	2/5	1/5
Horizontal Abduction	20°	20°
Shoulder Flexion	170°	170°
HG IR	70°	70°
Elevated and ER Ant Ribs	Elevated	Elevated

Assessment:

Patient demonstrates a PEC pattern and is experiencing right intercostal wall discomfort secondary to left AF IR control as well as decreased right intercostal flexibility. Due to the orientation of his pelvis and his inability to shift to his left, he was unable to rotate his spine to the left causing his upper trunk to compensate and place undue strain on his right intercostal wall. When rotating patient's legs to the right, pain increased which would be an indicator of limited left trunk rotation. Patient's inability to rotate his legs to the right (spine to the left) also reflects lack of left AF IR. Patient needs increased posterior capsule flexibility to establish left AF IR.

Treatment:

1. *Sidelying Obturator Restorative Technique (3rd Edition CD: Transverse Left Posterior Capsule Inhibition)*
 - Emphasis was placed on establishing left AF IR passively and actively.
2. *Sidelying Ischial Femoral Ligamentous Stretch (3rd Edition CD: Transverse Left Posterior Capsule Inhibition)*
 - Emphasis was placed on active left AF IR to increase posterior capsule flexibility and to teach the patient how to get into an AF IR position.
3. *Standing Posterior Capsule Stretch (3rd Edition CD: Transverse Left Posterior Capsule Inhibition)*
 - Emphasis was placed on upright left AF IR and increased left posterior capsule flexibility.
4. *Standing Passive Left AF IR with Right Trunk Rotation (3rd Edition CD: Transverse Left Posterior Capsule Inhibition)*
 - Emphasis was placed on passive left AF IR with active trunk rotation to begin to break down his pattern of compensation.

Second Visit

Subjective:

Patient states that his left hip is sore from his home exercise program. He reports that his right rib pain has decreased and he experiences less discomfort when rolling over in bed. Patient states that his low back still remains tight.

Objective:

	Left	Right
FA IR	22°	23°
FA ER	30°	32°
Adduction Drop Test	-	-
Hruska Adduction Lift Test	2+/5	3/5

Assessment:

Patient has established left AF IR but needs left glute med for AF / FA control. Patient also needs more activity that incorporates active left trunk rotation to increase left AF IR. Not ready to start a frontal plane program secondary to lacking left AF IR as well as sagittal plane pelvic position.

Treatment:

1. *Retro Stairs (2nd Edition CD: Left Gluteus Medius – Standing #5)*
 - Emphasis was placed on left AF IR with left glute med activity and left adductor activation.

2. *Alternating PRI Wall Squat (2nd Edition CD: Integration – Standing #11)*
 - Emphasis was placed on maximizing left AF IR by having the patient go into left trunk rotation.

3. *Standing Resisted Trunk Around with Left AF IR and Left Trunk Rotation (2nd Edition CD: Integration – Standing #19)*
 - Emphasis was placed on maximizing left AF IR by having the patient go into resisted left trunk rotation while in single leg support stance.

Third Visit

Subjective:

Patient states that intercostal pain has decreased. Patient also reports that his low back is not as stiff.

Objective:

	Left	Right
Adduction Drop Test	–	–
Hruska Adduction Lift Test	3+/5	3+/5
Shoulder Flexion	170°	170°
HG IR	70°	70°
Horizontal Abduction	20°	20°

Assessment:

Patient has established left AF IR through left trunk rotation activity. Patient now needs to maintain left AF IR while performing right trunk rotation. Patient also would benefit from increased chest wall flexibility and right apical expansion through manual techniques and left abdominal activity for opposition to his diaphragm through non-manual techniques.

Treatment:

Manual restorative techniques:

- Two-person infra-clavicular pump
 - Two-person right intercostal stretch
1. *Sidelying Swiss Ball Inhibition (3rd Edition CD: Frontal Right Intercostal Inhibition)*
 - Emphasis was placed on right thoracic adduction for increased right apical expansion and right intercostal flexibility.

 2. *Single Leg Right Apical Overhead Reach (2nd Edition CD: Integration – Standing #17)*
 - Emphasis was placed on upright left AF IR in single leg stance support with right thoracic adduction for increased right apical expansion and left abdominal activation for opposition.

3. *Right Sidelying Apical Expansion with Left Arm Reach (2nd Edition CD: Integration – Sidelying #20)*
 - Emphasis was placed on right thoracic adduction with active right trunk rotation.
4. *Latissimus Hang Stretch (3rd Edition CD: Frontal Latissimus Inhibition)*
 - Emphasis was placed on increased chest wall flexibility through inhibition of the latissimus.

Fourth Visit

Subjective:

Patient states that he is doing better. He has noticed no discomfort in his right ribs with activities of daily living. He reports that he swung a golf club for the first time in two years with minimal discomfort.

Objective:

	Left	Right
Adduction Drop Test	–	–
Hruska Adduction Lift Test	4/5	4/5
HG IR	80°	80°
Horizontal Abduction	35°	35°

Assessment:

Patient’s objective measurements have improved. Patient could benefit from initiation of frontal plane program. Continue all activity for left AF IR and right thoracic adduction.

Treatment:

Manual restorative techniques:

- Two-person infra-clavicular pump
 - Two-person right intercostal stretch
1. *Standing Right Step Around with Right Quadratus Lumborum Stretch and Right Apical Expansion (3rd Edition CD: Transverse Left Posterior Capsule Inhibition)*
 - Emphasis was placed on right trunk rotation in passive left AF IR.
 2. *Left Sidelying Left Flexed Adduction with Concomitant Right Extended Abduction (2nd Edition CD: Integration – Sidelying #14)*
 - Emphasis was placed on initiating frontal plane activity for left adductors and right abductors while remaining in left thoracic abduction.
 3. *Resisted Single Leg Lateral Dips (2nd Edition CD: Integration - Standing #27)*
 - Emphasis was placed on upright frontal plane adduction with abduction while maintaining left thoracic abduction.

Plan:

Patient is going to be seen in one month. If still doing well, discharge with a continued home program incorporating left AF IR and right intercostal flexibility.