The Buchberger-12®
rotator cuff and scapular stabilizing program

Dale J. Büchberger, DC
Past-President, American Chiropractic Board of Sports Physicians®
Team Chiropractor, Auburn Doubleday’s and Syracuse Skychiefs Baseball Clubs

Eastern Athletic Trainers Association Annual Meeting
January 8-9, 2005
Boston, MA.

“The secret to education is in respecting the students.”
Ralph Waldo Emerson
The Buchberger “12”
V3.2

Rotator cuff and scapular strengthening program
Buchberger “12”

- Standing 3-way
- SLA
- Modified Empty Can
- Field Goal
- Dynamic Blackburn
- Concentric/Eccentric ER
- Plus
- Bilateral BB3
- Biceps T-curl
- Subscapularis Pull
- ER standing
- Scapular retraction-End Range
RTC Program Day 1

- Side Lying Abduction (weight)
- Plus (dyna-disc)
- Field Goal (weight)
- Concentric/Eccentric ER (weight)
- Modified Empty Can (weight)
- T-curl-alt. Pro./Sup. W/hand (weight and/or tube)
Side Lying Abduction 1

- Keep the humerus (upper arm) in the scapular plane
Side Lying Abduction 2

- Lift the humerus in the scapular plane
- This is a linear movement
- Only raise to the height of the knee
- Approx. 30 degree arc
Plus 1

- Elbows stay fully extended
- Retract scapulas
- Torso, spine and LE’s are rigid
Plus 2

- Protract scapulae (DO NOT FLEX the Thoracic-Spine!)
- Keep elbows extended
- From the Dyna-Disc progress to performing the “plus” with feet on a physio-ball and vary the lever length (place ball under knees to start and progress to ball under feet.)
Field Goal 1

- Place dyna-disc under chest
- Arms hang relaxed
- First move (pictured) is to actively retract the scapulae (pinch the shoulder blades together).
Field Goal 2

- While maintaining scapular retraction, extend the shoulders to 90 degrees.
- The elbows should be flexed to 90 degrees (as Pictured).
Field Goal 3

- Maintain 90 degrees of shoulder extension and scapular retraction.
- Now ER the shoulder with the thumbs pointed up as pictured.
- Be sure to reverse each motion SLOWLY!
Concentric/Eccentric 1

- Side lying ER, thumb backwards
- Elbow tucked into ASIS (front of your hip)
Concentric/Eccentric 2

- From the ER position press up to the ceiling extending the elbow.
- In the next photo you will keep the elbow fully extended while you perform horizontal adduction with IR (turning the thumb to the floor while crossing the chest).
- For baseball pitchers, find your follow through position and use that for this exercise. If there is anterior shoulder pain, lower the arm to a comfortable level of adduction.
Concentric/Eccentric 3
Modified Empty Can 1

- Start in the thumbs down or “empty can” position. Retract both scapulae (scapular set).
- In the next photo you will begin to elevate the humerus (upper arm) with the thumbs pointed downward in the scapular plane. When you reach approximately 45 degrees of scapular plane elevation begin to ER while continuing to elevate the humerus.
- **Maintain the scapular plane throughout the motion!**
Modified Empty Can 2
Modified Empty Can 3

- Be sure to continue to elevate the humerus while you perform ER.
- **Notice the position of the elbow (100 degrees of abduction)**
- The scapula should be reset before each rep!
Elbow Flexion Pronation/Supination

- **Photo 1:** Elbow flexion with supination (biceps)
- **Photo 2:** Elbow flexion with pronation (brachialis)
- In both DO NOT drop the elbow!!! Maintain elbow position during elbow flexion. This will work the serratus anterior muscle.
RTC Program Day 2

- Subscapularis Pull (tube)
- ER standing (tube)
- Bilateral BB3 (weight)
- Standing 3-way (weight)
- Dynamic Blackburn (weight)
- Scapular retraction-End Range (weight)
Subscapularis Pull

- Start with the elbow fully extended and the thumb up. Pull the tube behind the back (causing IR) and touch thumb to the inferior angle of opposite scapula.
ER with Scapular Retraction

- Keep the elbow tucked into the side as you ER the humerus. As ER is completed retract the scapulae together.
Bilateral Blackburn 3x3 - position 1

- Dyna-disc under chest
- Arms in ER
- Retract scapulae with elbows fully extended
- 1. Extend shoulder with thumbs to the floor. 2. Extend shoulders with palms to the floor. 3. See below.
- In next photo lift thumbs to the ceiling with the elbows fully extended
- Do not hyperextend the shoulders
- Hyperextension of the shoulders will cause excess stress on the anterior capsule resulting in shoulder instability.
Bilateral Blackburn 3x3 – position 2

Maneuver one is with the thumbs down, maneuver two is with the palms down and the third position (shown) is with the thumbs up.
Standing Three-way - 1

- Start with the arms at the sides and the elbows extended
- Retract the scapulae
- Raise the arms with the thumbs up in forward flexion with the elbows fully extended slowly.
Standing Three-way 2

- As in position one begin with the “scapular set”
- Raise the arms with the thumbs up in the scapular plane
- Elbows fully extended
Standing Three-way 3

- As in position one begin with the “scapular set”
- Thumbs up in abduction
- Elbows fully extended
- Be sure not to extend the shoulders!
Dynamic Blackburn 1

- Step 1 is to place the hands on the buttocks and retract the scapulae
Dynamic Blackburn 2

- Depress the scapulae by reaching for your feet
- Keep the hands together
Dynamic Blackburn 3

- While keeping the hands together lift them off of your buttocks
Dynamic Blackburn 4

- Slowly release hands
- Begin to ER the humerus while continuously abducting the humerus
Dynamic Blackburn 5

- Continue ER and abduction: thumbs are up now and you are at 90 degrees of abduction
Dynamic Blackburn 6

- Continue ER and abduction: thumbs are up now and you are at 100 degrees of abduction
- This is the end range of motion for this exercise. Do Not go higher!
- Reverse the motion slowly. The next rep is started from position 1.
Scapular Retraction - End range 1

- Face down; dyna-disc under chest
- Shoulders and elbows at 90 degrees
- First movement is to retract the scapulae
- The forearms should not come off the floor
Scapular Retraction - End range 2

- While maintaining scapular retraction, lift the elbows and thumbs to the ceiling.
- Maintain 90/90 position.
Thank You!

www.rotatorcuff.net