Armwrestling

Pulling Big III

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.::Pictures from Get a Grip, Marcio Barboza vs. Ron Bath ::.
www.PULLINGJOHN.com

First off, I want to say thank you to everyone for your ongoing support of the Diesel Crew. This Armwrestling article series has been a huge success. As you know from the original articles, Armwrestling – Pulling Big I and the followp-up article Armwrestling – Pulling Big II, in this installment, we will be discussing how to tie in more complex movements to isolate certain components and specific muscle groups of Armwrestling. There is also an entire section devoted to prehab/rehab considerations of the shoulder, elbow and hand complexes.

GOT WOOD?

Let's look at another way to work stability of the wrist and create massive strength in your thumb. Go to your local lumber yard! You might be a little puzzled but there is a method to my madness. Cut a 2x4 - 8" long. Take an eye hook and screw it in about 1" from the end of the 2x4 (on center). Now snap a carabiner and JumpStretch band to the eye hook and you have a very unstable apparatus to move through the planes of motion of Armwrestling. You will be amazed at the strength needed to hold the wood as the band stretches. Want to get really crazy? Try 2 – 2x4's!!! This will be a more "open handed" grip and increase the need to flex your palm and crush the wood (your opponent's hand). This attention to grip in an unstable environment (accommodating resistance with an open hand) and specific biomechanical analysis of movement will be a nice addition to your arsenal.

Let's look at the four different setups:

1. **1 – 2x4 – Top / Bottom Grab** – a lot of stress on the fingers and thumb – great for side pressure.
2. **1 – 2x4 – Side Grab** – Requires great wrist strength to lock the wrist before pulling – great for the hook.
3. **2 – 2x4's – Top / Bottom Grab** – same as above – but much more advanced.
4. **2 – 2x4's – Side Grab** – same as above – but much more advanced.

1

2

3

4

THE PRESS:

Let's first look at one of the most impressive presses I have ever seen - Ron Bath pressing Taras Ivankim at the Pro Arm Open's in Finland (www.ProArm.com.) Right around 0:50 seconds you see Ron, flex his lats, traps, pec major, rhomboids and obliques so hard it is visible through his shirt. He rotates, pivots – contract his obliques hard and subsequently increases the torque on his elbow exponentially as he starts to press Taras. This is an amazing display and at full speed – it looks like it is in slow motion. It gives us a clear picture of the

movement real time, the forces acting in the movement and the muscles involved with this technique. Ron has to incorporate his entire body through his hands to be victorious. Remember: Power is developed from the ground up, from the core out, and from the hands in. If any link in this chain is weak – the technique will break down and you will fail. Just click the image below for the video.

http://www.proarm.com/video2/Bath_Ivankim_2.wmv
www.ProArm.com
Ron Bath USA VS Taras Ivankim UKR -95 kg semifinal
Pro Arm Open Finland

TOWEL CORE ROTATIONS:

So here we are simulating the press – and integrating many functional components during the movement. The grip component of grabbing your opponents hand can be done with a thick towel, the internal rotation and torque on the elbow is targeting the subscapularis and brachioradialis (flexion of the bicep and pronation of the lower arm) and the core rotation is targeting the transverse abdominus and obliques. The setup is anchoring a JumpStretch band to a fixed object and attaching a thick beach towel through the band. Stand facing away from the setup and fix your elbow at a 90 degree angle at your side. Start the movement with your arm straight and flex your lats to bring your elbow to your side and increase the tension on the JumpStretch band. Then transition to internally rotating the lower arm and flexing your lats, trap, teres, pec major and subscapularis as your hand rotates across your body. Finally, the last movement is a core rotation and oblique contraction. This movement can be done for reps and will condition the muscle memory for pressing and maintain help the stabilizing musculature for this sport.

PUMP THE WELL:

We will now look at a 1 arm lat pulldown into a tricep extension with a Jumpstretch band and towel. This is another exercise that incorporates the entire body into the movement and is targeting certain specific movement breakdowns of Armwrestling. Unilaterally flexing the lattisimus dorsi (and subsequent stabilization statically of the posterior delts and teres) will maintain integrity of the shoulder complex. Finishing with a tricep extension against a JumpStretch band at it utmost stretch position will simulate the finishing component of a press and the towel, of course, is our grip component. The thicker the towel the better - for the crush strength to control Andre the Giant's hand.

TRICEP EXTENSION:

Direct triceps work is essential for integrity of the elbow and finishing a press. You must use different implements; towel, IronMind Rolling Thunder, thick bars to vary your grip component and increase the difficulty of the movement.

TRICEP EXTENSION WITH AN IRONMIND ROLLING THUNDER HANDLE

TRICEP EXTENSION WITH A THICK BAR

PREHAB / REHAB:

If we focus specific areas of our strength program to address prehab / rehab considerations of our sport we will; recover quicker from injury, there will be less chance of acute or chronic repetitive injury and we will achieve our maximum potential for power output. This is for every sport – but for this article we will focus on Armwrestling. We will look at a few (there are many more – but those are for future articles) exercises that will target the shoulders, upper back (stabilizers: teres, rhomboids, traps), pec major, the elbow complex and finally the hand itself.

QUICK DEFINITIONS:

PREHAB – Prehabilitation – proactive identification and correction of a muscle imbalance, and maintenance of positive athletic performance. Prehab is a personalized exercise program that continually evolves. The goal is the prevent rehab. The prehab program will be developed to be progressive, periodically re-evaluated to change with the athlete's needs and integrated into the athlete's strength program.

REHAB – Rehabilitation – restoring normal joint, tendon, ligament and muscle function after acute / chronic injury by targeting exercises that restore muscle strength, flexibility and range of motion.

SHOULDER CONSIDERATIONS:

We will focus primarily on the subcapularis as its health is essential for longevity in Armwrestling.

WHAT IS THE SUBSCAPULARIS MUSCLE?

The subscapularis muscle originates from the underside of the shoulder blade and inserts at the front of the upper arm (humerous). It is a very powerful muscle that rotates the arm inwards and is part of the rotator cuff group of muscles.

ORIGIN
Medial two thirds of subscapular fossa

INSERTION
Lesser tuberosity of humerus, upper medial lip of bicipital groove, capsule of shoulder joint

ACTION
Medially rotates arm and stabilizes shoulder joint

NERVE
Upper and lower subscapular nerves (C5,6) (from posterior cord)

http://www.rad.washington.edu/atlas/subscapularis.html

The subscapularis is responsible for internal rotation of the arm - so, we can see, that if there is a weakness or injury to the subscapularis – there is going to be big problems for the athlete. The muscles involved throughout a typical match would include the deltoids, trapezius, triceps, pectoralis major, latissimus dorsi, core complex and of course the rotator cuff muscles – the supraspinatus being one of them. Similar to a baseball pitcher, "the

muscles that are involved with slowing external rotation are the subscapularis, pectoralis major, and latissimus dorsi (Mullins, 1993)", so we can see that it doesn't matter if you are winning or losing a match – the supraspinatus is activated either way.

SUBSCAPULARIS PULL-UPS:

The movement will be the same as a typical pull-up, but instead of staying in the frontal plane during the eccentric phase, you "push" yourself away from the bar and lower very slowly – to initiate some static contraction and Time Under Tension (TUT) for the subscapularis. Click on the image below for the video.

SUBSCAPULARIS PULL-UPS

INTERNAL ROTATIONS:

You will be maintaining the health of the rotator cuff complex and increasing the functionality with grip implements. Pay special attention to keep the head up and shoulder in alignment.

STRAIGHT ARM PULL-DOWNS WITH THICK BAR:

This movement should start with a scapular retraction and contraction of the upper back and finally extension of the shoulder to the waist. Controlling the eccentric will add more TUT for the subscapularis.

ELBOW CONSIDERATIONS:

SLEDGE ROTATIONS:

Because of the high torque on the elbow during a typical Armwrestling match, the potential for common injuries such as; medial and lateral epicondylitis are ever present.

Medial Epicondylitis, also referred to as 'golfer's elbow,' is considered a cumulative trauma injury. The muscles that are used to pull the hand down, the wrist flexors, are located on the palm side of the forearm. These muscles join together and attach to the common flexor tendon, which attaches to inside medial epicondyle (the inside of the elbow). When the wrist flexors are overused, the common flexor tendon becomes inflammation and painful. Pain on the inside of the Elbow, usually during or after intense use, usually indicates Medial Epicondylitis. Because people who play golf sometimes develop this problem it has become known as 'golfer's elbow'. (http://www.handuniversity.com/topics.asp?Topic_ID=4)

Lateral epicondylitis, also referred to as 'tennis elbow,' is considered a cumulative trauma injury. This condition occurs in response to inflammation and degeneration of the tendon that attaches to the muscles of the forearm, specifically, the origin of the extensor carpi radialis brevis muscle. Pain on the outside of the Elbow, usually during or after intense use, usually indicates Lateral Epicondylitis. In some cases, lifting, grasping even light use may be difficult or painful. Because people who play tennis or other racquet sports sometimes develop this problem it has become known as 'tennis elbow'. (http://www.handuniversity.com/topics.asp?Topic_ID=5)

One quick solution for preventing (prehab) or eliminating (rehab) these issues is a simple sledge hammer. You could start with a 6 lb or 8 lb sledge. Fix your arm at a 90 degree angle against your torso and grasp the sledge hammer handle. Dependent upon your strength and the severity of the injury – you will need to grasp the handle closer or further away from the sledge hammer head. You can use athletic tape on the handle to measure your progress. Start performing supination and pronation movements

while consideration your own biomechanics and injury limitations. Repeat for sets of 15 – 20 repetitions. This exercise should be used as prehab and rehab – which means you will continue to do it as a conditioning tool even after your injury / inflammation is no longer present.

HAND CONSIDERATIONS:

CONTRAST BATHS WITH GOLF BALL ROTATIONS:

The contrast of hot-cold baths creates a pumping of the blood in and out of the submerged body part(s). Blood vessels dilate in the heat and constrict in the cold. The cold component: the immediate response is vasoconstriction (decreased size) of the blood vessels in the skin and reduction of blood flow which will assist in helping to decrease the swelling, inflammation and pain. The hot component: heating an area is also associated with an increased blood flow to the area. With increased blood in the injured area, nutrients are delivered and wastes are carried away from the area more effectively and has also been shown to decrease pain and to help reduce muscle spasms. Contrast baths are very effective in treating carpal tunnel syndromes and hand / forearm tendonitis. Get yourself 2 – 5 gallons buckets. Fill the first bucket with ¾ full of water and dump massive quantities of ice in it. The other bucket you want to fill about ½ full with water and then fill it the rest of the way with boiling water from the stove. Take your golf balls and submerge your hand in the hot water bucket and rotate the golf balls clockwise (CW) and counter clockwise (CCW). Do this for about 1 minute then switch to the ice bucket and repeat the golf ball rotations. Go back and forth between buckets for approximately 15 minutes. Keep your hand in each bucket for about 30 seconds each. We will discuss more advanced techniques in our upcoming Elbow Rehab eBook on the **DieselCrew.com** site.

EXTENSOR BUCKET:

A healthy hand - with balanced opposing musculature will allow for maximum power potential of the flexors of the hand because you will eliminate imbalances and decrease the potential for overuse injury or inflammation. Development of the hand extensors will maintain the integrity and alignment of the carpal bones, as well. To "build" an extensor bucket or jar - grab a large jar or plastic container that has an opening approximately 4" diameter - fill it will bent nails, rocks, broken teeth – anything that will add weight. Insert your hand up to the first or second knuckles and extend your fingers against the sides of the jar. Lift for several sets and hold for time – before, during or after your normal workouts.

This 3 article series evolved from a note from a good friend – so I didn't know where it was going to end up. I hope you have gained some insight and creative empowerment for your own program. Please visit www.DieselCrew.com frequently and thank you for your continued support. Please look for upcoming projects from the Diesel Crew, including their new Sandbag Training DVD series, new Grappling Conditioning DVD series, eBooks, traveling and speaking at seminars, clinics or conferences, selling IronMind products and hosting the Global Grip Challenge 2005.

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www.DieselCrew.com
Leaders in Grip Strength
"Achieving Beyond Potential"

POINTS TO REMEMBER:

- Be creative. I've shown you a few ideas in this 3 article series, but there are a hundred different variations and modifications.
- Do your research. Learn about your sport. Learn about the biomechanical and physiological needs of your sport.
- Don't neglect your prehab/rehab protocols. You must maintain the health of your stabilizer and antagonist muscle groups to ensure longevity.
- Always perform a good warmup to increase your core temperature and elasticity of your tendons, ligaments and muscles.
- Study the good pullers and why they are successful
- Think for yourself. Build your own comprehensive strength program with your own experiences. What works for one person will not always work for you.
- Visit www.DieselCrew.com everyday.

SPECIAL THANKS:

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