



Fundamentals of Strength Training For Seated Athletes

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Coach Greg Hasterok, Head Tennis Coach SDSU

About Coach A.J. Munoz-Bond



- Dual M.S. SDSU
- Director & Head S&C SDSU Adapted Athletics
- Owner AJ True Strength
- Work in greater San Diego Area

About Coach Greg Hasterok

- Team USA World Team Cup Member
 - Gold Medalist (2013, 2015)
 - Silver Medalist (2014)
- Career High World Ranking of #5 Singles, #3 Doubles
- Net Generation Regional Provider For California

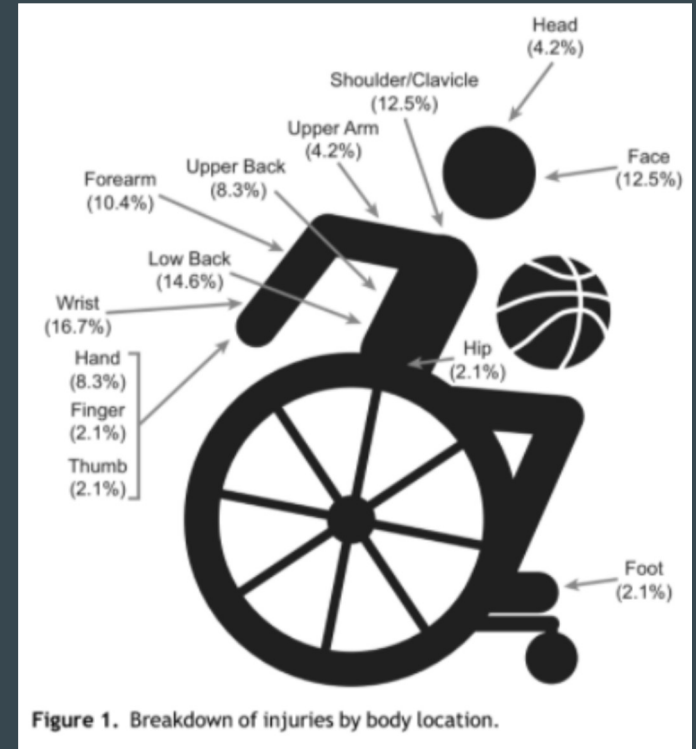


IDENTIFY COMMON DYSFUNCTIONS

DISABILITY	ANTERIOR DOMINANCE	POSTERIOR WEAKNESS	POOR ROM	ABDOMINAL DEFICITS	GRIP STRENGTH DEFICITS
SPINA BIFIDA	✓	✓	Possible	Possible	Possible
SCI	✓	✓	Possible	Possible	HIGH SCI ONLY
LIMB DEFICIENCY	✓	✓	Possible	Possible	UE ONLY
CEREBRAL PALSY	✓	✓	✓	Possible	UE ONLY

Results: Injury Location

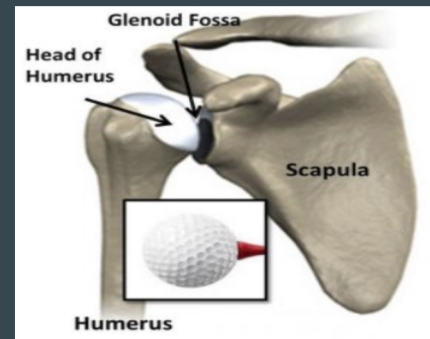
- Upper extremity pain most prevalent
- Shoulder reported in 90% of surveys
- Chronic/Overuse injuries 52% of total
 - Shoulder impingement
 - Tendonitis



(Kasitinon et al. 2020)

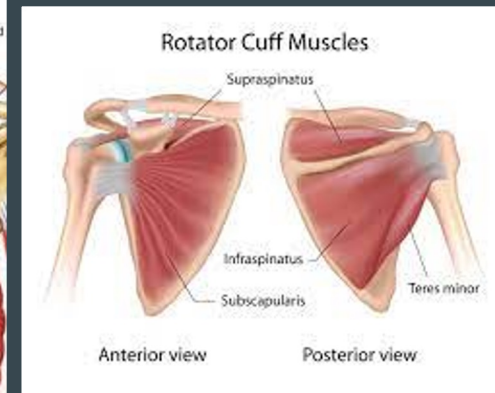
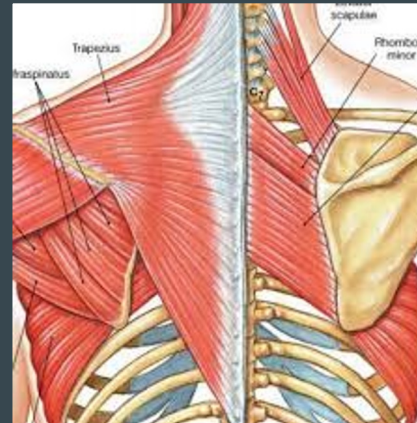
Anatomy - Structural

- Scapula forms **foundation**
- GH joint inherently unstable
- Poor positioning and/or movement **impairs function**



Anatomy - Functional

- Scapular stabilizers form base
- Rotator Cuff creates scaffolding
- Inefficient movement leads to:
 - Pain
 - **Injury**

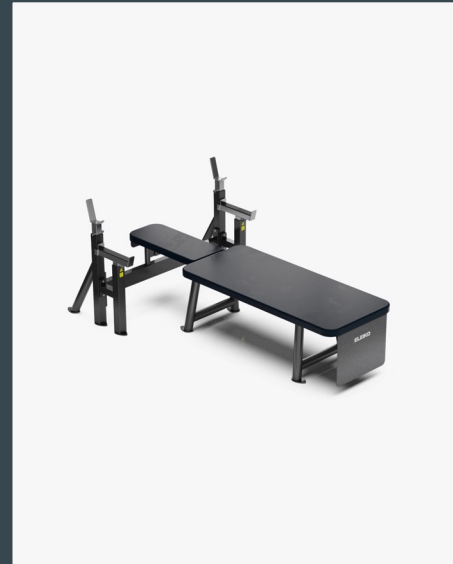


Equipment - Part 1: Anatomy of the Wheelchair



Equipment - Part 2: Gym

- Creativity is key, equipment helps
 - No breaks?
 - Active hands
 - Cables and bands
 - Para Bench
 - Gait Belt
 - Ski Erg



General Approach

- Communication is key
- Help if asked
 - Build independence
- Same BUT Different
 - Athlete vs Gen. Pop.
 - Goals: Client vs Yours
 - What works vs what doesn't
 - Strategy



Movement Pattern Paradigm

- Choose yours and own it!
 - Horizontal Push/Pull
 - Vertical Push/Pull
 - Rotation/Anti Rotation
 - Hip Flexion/Extension



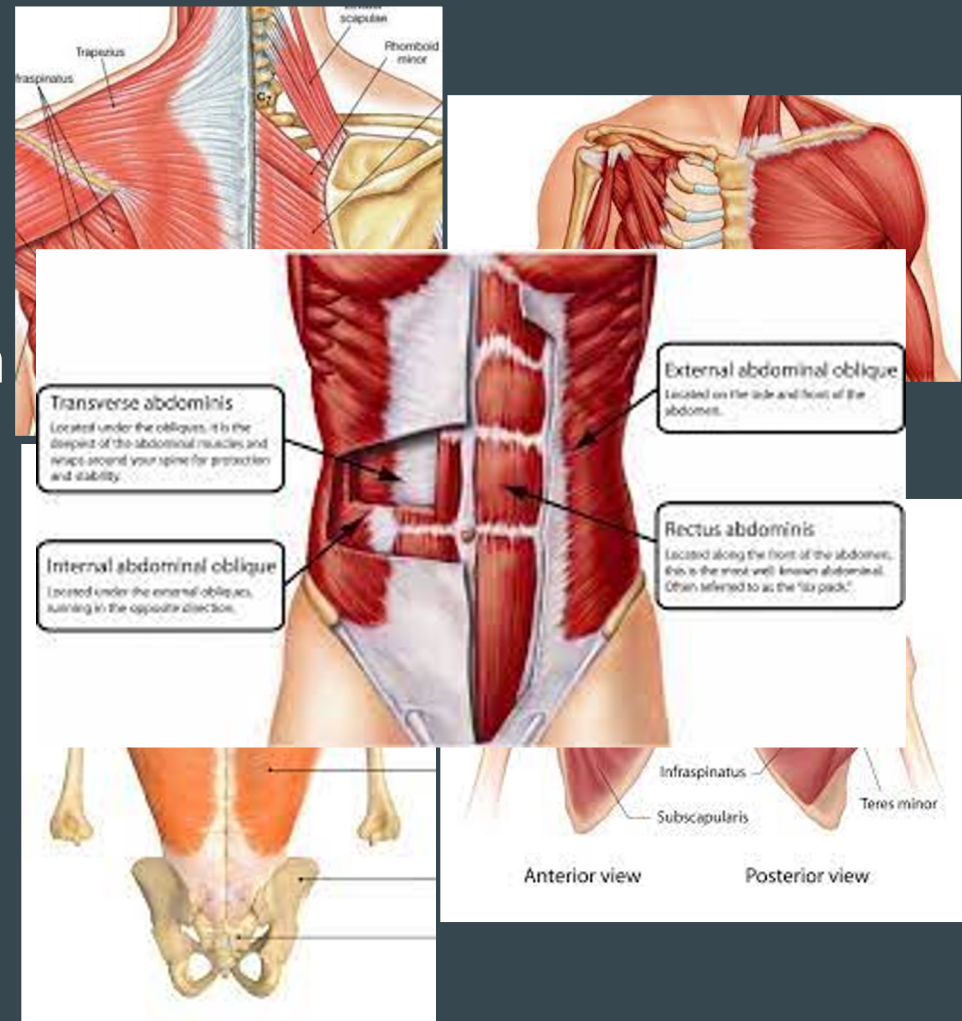
Programming Basics

- May have to work unilaterally only
- High volume pulling
- Low volume pushing
- Bulletproof the rotator cuff
- Scapular stabilizers
- CORE??



Find Your Stability

- What is the core?
- Stability-Mobility Continuum
- Lumbopelvic
 - May be artificial
- Scapulothoracic
 - Most attention needed



Adapting

- No “one best way”
- Don't over complicate
- Creativity is key
- Be open to evolving what you know
- Focus on desired stimulus



Seated Warm-Up Together

- 30 Seconds of everything
 - Arm circles (4)
 - Swords
 - Chair twists
 - Scarecrows
 - Pull apart series (2)
 - Back slaps
 - Partner MB series



Time to Pair Up!

- Four (4) Stations
- Station 1: MB Side Toss
- Station 2: Pallof Press
- Station 3: Fan Drill
- Station 4: Single Arm Serratus Rotations



Keep in Touch!

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