WEIGHT LIFTING PROGRESSION

ACROMIOPLASTY WITH DISTAL CLAVICLE RESECTION, ROTATOR CUFF REPAIR (POST OPERATIVE)

A. CONTRAINDICATED EXERCISES FOR PHASE I - (ILLUSTRATED BELOW)
   - Front Raises, lateral raises, chest flys,
   - Bench press, overhead tricep extensions, French Curls
   - Overhead or military press, dips, dumbbell press
   - Push press, push jerk, split jerk (not pictured)

DO NOT DO:

<table>
<thead>
<tr>
<th>Front Raises</th>
<th>Lateral Raises</th>
<th>Chest Flys</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bench Press</td>
<td>Overhead Tricep Ext</td>
<td>French Curls</td>
</tr>
<tr>
<td>Military Press</td>
<td>Dips</td>
<td>Dumbbell Press</td>
</tr>
</tbody>
</table>
B. **SUBSTITUTION CORE EXERCISES (ILLUSTRATED BELOW)**

- Scapular Protraction on Smith Machine or Universal
- Straight Arm Lat Pull down
- Tricep Extension Progression
- Wide Grip Rows
- Leg press or lunges

*** May begin substitution phase following full shoulder PROM and abiding by soreness rules on page 19

<table>
<thead>
<tr>
<th>Scapular Protraction</th>
<th>Straight Arm Lat Pull Down</th>
<th>Tricep Ext</th>
</tr>
</thead>
<tbody>
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<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Wide Grip Rows</th>
<th>Leg Press</th>
<th>Lunges</th>
</tr>
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</tbody>
</table>

**Accessory Exercises:**

<table>
<thead>
<tr>
<th>Reverse Deltoid Fly</th>
<th>Dumbbell Tricep ext</th>
<th>Seated Scapular Depression</th>
<th>Concentration Curls</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

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Calculating 1 Rep Maximums

1. Select a weight that can be completed with proper form 6 to 10 times for a given exercise
2. Perform the exercise with the selected weight and record the number of performed repetitions (the last repetition should be challenging but with good form)
3. On the 3% rule chart pictured below, find the number of repetitions performed in the max reps row. Scroll down inside the chart and find the weight closest to the weight you performed for the given exercise (the exact weight may not be available)
4. Your estimated 1 rep maximum for that given exercise is the load associated with the 100% 1RM column of that same row
5. Multiply the estimated 1 rep maximum by the percentage for the designated step to determine the prescribed weight for the given exercise

**EXAMPLE:**
Bench Press - performed 6 repetitions at 120 lbs
Approximated 1 rep max= 140 lbs
65% 1 RM for Bench Press (140 x 0.65) = 91 lbs
ACROMIOLASTY WITH DISTAL CLAVICLE RESECTION, ROTATOR CUFF REPAIR (POST OPERATIVE)

**Substitution- Phase I- Exercises**

**Goals Phase I:** Prepare the upper extremity for more intense strengthening;

**Time Frame:** 8 wks or per MD orders (progressed on an individualized basis)

<table>
<thead>
<tr>
<th>Step 1</th>
<th>Accessory Exercises (Steps 1-5)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Core Exercises</strong></td>
<td><strong>Rear Deltoid Raises</strong></td>
</tr>
<tr>
<td><strong>Scapular Protraction</strong></td>
<td><strong>Scapular Depression with Assisted or Seated Dip Machine</strong></td>
</tr>
<tr>
<td>Receive the bar in a normal bench press position (hands slightly less than shoulder width apart) with the elbows locked. Push the bar straight up using the shoulder and chest and round the shoulders (no bending elbows or wrists). Movement range is small. Alternate an overhand (palms turned downward) grip with an underhand grip (palms turned upward) every other set.</td>
<td><strong>Concentration Curls</strong></td>
</tr>
<tr>
<td><strong>Straight Arm Lat Pulldown</strong></td>
<td><strong>Program Design</strong> - 3 sets x 8 reps</td>
</tr>
<tr>
<td>Assume normal front lat pulldown position. Take shoulder width grip in underhand position (palms facing upward). Lean back to a comfortable position. Lock elbows and wrists. Squeeze shoulder blades together and pull bar down with just upper back muscles. Elbows and wrists remain locked.</td>
<td></td>
</tr>
</tbody>
</table>
**Step 2**  
Repeat same exercises  
**Program Design**  
4 sets x 10 reps at 60%

**Step 3**  
Repeat same exercises  
**Program Design**  
5 sets x 10 reps at 60%

**Step 4**  
Repeat same exercises as previous step  
- addition of Tricep Extensions with dumbbell  
**Program Design**  
5 sets x 10 reps at 65%

**Step 5**  
Repeat same exercises as previous step  
**Program Design**  
5 sets x 10 reps at 65%

**Step 6**  
**Core Exercises**  
Scapular Protraction  
Straight Arm Lat Pulldown  
Supine Tricep Extensions (Nose breakers)  
Tricep Extension with Lat Pull Down Bar  
Wide Grip Rows  
Leg Press or lunges  
**Program Design**  
4 sets x 10 reps at 70%  

**Accessory Exercises** (Steps 6-8)  
Rear Deltoid Raises  
Scapular Depression with Assisted or Seated Dip Machine  
Tricep Extensions with dumbbell  
Concentration Curls  
**Program Design**  
3 sets x 8 reps

**Step 7**  
Same exercises as previous step  
**Program Design**  
5 sets x 10 reps at 70%

**Step 8**  
Same exercises as previous step  
**Program Design**  
5 sets x 8 reps at 75%
ACROMIOPLASTY WITH DISTAL CLAVICLE RESECTION, ROTATOR CUFF REPAIR (POST OPERATIVE)

**Phase II—Exercises**

*Goals:* Full ROM Bench Press, Lat Pull Down, High Pulls  
*Time Frame:* 2.5-5 weeks (lift 2-3x/week with 1-2 days rest between workouts; follow soreness rules on page 19)

### Step 9

#### Core Exercises

**Bench Press**

Receive the bar in a normal bench press position (hands slightly less than shoulder width apart) with the elbows locked. Push the bar straight up using the shoulder and chest and round the shoulders (no bending elbows or wrists). Movement range is small. Alternate an overhand (palms turned downward) grip with an underhand grip (palms turned upward) every other set.

**Lat Pull down**

Assume normal front lat pulldown position. Take shoulder width grip in underhand position (palms facing upward). Lean back to a comfortable position. Lock elbows and wrists. Squeeze shoulder blades together and pull bar down with just upper back muscles. Elbows and wrists remain locked.

**Power Clean**

Lift bar off a waist-level rack using a power clean grip. Lower the bar to mid thigh with the knees bent and shoulders slightly in front of the bar. Extend the legs and back, then shrug the bar with a quick powerful motion. The elbows remain straight throughout the movement.

**Back Squat**

High bar squat, modified center of gravity bar or stingray

<table>
<thead>
<tr>
<th>Accessory Exercises</th>
</tr>
</thead>
<tbody>
<tr>
<td>Straight Arm Lat Pulldown</td>
</tr>
<tr>
<td>Seated Rows</td>
</tr>
<tr>
<td>Tricep Extensions using lat pull down machine</td>
</tr>
<tr>
<td>Lateral and Front Deltoid Raises</td>
</tr>
<tr>
<td>Concentration Curls</td>
</tr>
</tbody>
</table>

**Program Design:** 3 sets x 8 reps

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### Shoulder Press – Functional Isometrics at 60 and 90 degrees
Using a squat rack or Smith Machine, lock bar in front shoulder press position in place so elbows are below shoulder level and perform isometric contractions (30 times contract 5 seconds). Move bar up so elbows are even with shoulders and perform isometric contractions (30 times contract 5 seconds).

**Program Design** - 3 sets x 10 reps at 65% of 1 Rep Max

### Step 10

#### Core Exercises

**Partial Bench Press using underhand grip**  
*Always warm up with straight arm bench press*
- Place a 6 inch towel roll under T shirt before assuming normal bench press position. Assume a underhand grip (palms turned upward) with hands slightly less than shoulder width apart. The bar is lowered until it touches the towel then pressed to the starting position.

**Lat Pull Down Shrugs with overhand grip**
- Assume normal front lat pulldown position. Take shoulder width grip in overhand position (palms facing downward). Lean back to a comfortable position. Lock elbows and wrists. Squeeze shoulder blades together and pull bar down with just upper back muscles. Elbows and wrists remain locked.

#### Accessory Exercises
- **Straight Arm Lat Pulldown**
- **Seated Rows**
- **Tricep Extensions with lat pull down machine**
- **Lateral and Front Deltoid Raises**
- **Concentration Curls**

**Program Design** - 3 sets x 8 reps

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and back, shrug the bar with a quick powerful motion, then complete the shrug by pulling the bar into an upright row position.

**Back Squat**
High bar squat, modified center of gravity bar or stingray

**Shoulder Press – Functional Isometrics at 60 and 90 degrees**
Using a squat rack or Smith Machine, lock bar in front shoulder press position in place so elbows are below shoulder level and perform isometric contractions (30 times contract 5 seconds). Move bar up so elbows are even with shoulders and perform isometric contractions (30 times contract 5 seconds).

**Program Design** – 4 sets x 10 reps at 65% of 1 Rep Max

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**Step 11**

**Core Exercises**
**Partial Bench Press using normal grip (Always warm up with straight arm bench press)**
Place a 6 inch towel roll under T shirt before assuming normal bench press position. Assume an overhand grip (normal grip) with hands slightly less than shoulder width apart. The bar is lowered until it touches the towel then pressed to the starting position.

**Partial Lat Pull Down with underhand grip**
Place a 6 inch towel roll under T shirt before assuming normal lat pulldown position. Assume an underhand grip (palms turned upward) with hands slightly less than shoulder width apart. Lean back to a comfortable position. Initiate movement by squeezing shoulder blades together then pull bar down until it touches the towel roll. Return to starting position.

**Accessory Exercises**
Straight Arm Lat Pulldown
Seated Rows
Tricep Extensions with lat pull down machine
Lateral and Front Deltoid Raises
Concentration Curls

**Program Design** – 3 sets x 8 reps
### Power Clean
Begin with the bar at mid shin level. Mid shin level should be attained through the use of bumper plates or wooden practice plates using a power clean grip. During the initial phase the bar is lifted from the floor and the athlete moves through a normal power clean motion finishing in an upright row position. **Do not** rack the bar.

### Back Squat
High bar squat, modified center of gravity bar or stingray

### Shoulder Press – Functional Isometrics at 60, 90 and 120 degrees
Using a squat rack or Smith Machine, lock bar in front shoulder press position in place so elbows are below shoulder level and perform isometric contractions (30 times contract 5 seconds). Move bar up so elbows are even with shoulders and perform isometric contractions (30 times contract 5 seconds).

#### Program Design
- 5 sets x 10 reps at 65% of 1 Rep Max

### Step 12

#### Core Exercises

##### Full Bench Press using underhand grip
*(Always warm up with straight arm bench press)*
- Assume an underhand grip (palms turned upward) with hands slightly less than shoulder width apart. Complete full bench press using an underhand grip.
- Concentrate on keeping arms close to the sides.

##### Partial Lat Pulldown with overhand grip
- Place a 6 inch towel roll under T shirt before assuming normal lat pulldown position. Assume an overhand grip (palms turned downward) with hands slightly less

#### Accessory Exercises
- Chest Flys
- Straight Arm Lat Pulldown
- Seated Rows
- Tricep Extensions with lat pull down machine
- Lateral and Front Deltoid Raises
- Bicep Curls

#### Program Design
- 3 sets x 8 reps
than shoulder width apart. Lean back to a comfortable position. Initiate movement by squeezing shoulder blades together then pull bar down until it touches the towel roll. Return to starting position.

**Power Clean – Hang Clean from power position**

Lift bar off a waist-level rack using a power clean grip. Lower the bar to mid thigh with the knees bent and the shoulders slightly in front of the bar. Clean the bar from this position concentrating on proper timing and rack position. Avoid letting the bar “crash” on the shoulders. Athletes should drop the bar after each clean. Hands should be kept on the bar, but only to control the bar, not to decelerate it.

**Back Squat**

High bar squat, modified center of gravity bar or stingray

**Partial Shoulder Press**

Using a squat rack or Smith Machine place the bar in a starting position for the front shoulder press position. Press the bar from the starting position until equal with the top of the forehead. Return to starting position.

**Incline Bench Press**

Receive the bar in an incline bench press position (hands slightly less than shoulder width apart) with the elbows locked. Push the bar straight up using the shoulder and chest and round the shoulders (no bending elbows or wrists). Movement range is small. Alternate an overhand (palms turned downward) grip with an underhand grip (palms turned upward) every other set.

**Program Design**

4 sets x 10 reps at 70% of 1 Rep Max
### Step 13

<table>
<thead>
<tr>
<th><strong>Core Exercises</strong></th>
<th><strong>Accessory Exercises</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Full Bench Press using normal grip</strong> <em>(Always warm up with straight arm bench press)</em></td>
<td><strong>Chest Flys</strong></td>
</tr>
<tr>
<td>Assume an overhand grip (normal grip) with hands slightly less than shoulder width apart. Complete full bench press using an overhand grip. Concentrate on keeping arms close to the side. Do not allow weight to bounce off chest.</td>
<td><strong>Straight Arm Lat Pulldown</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Seated Rows</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Tricep Extensions with lat pull down machine</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Lateral and Front Deltoid Raises</strong></td>
</tr>
<tr>
<td><strong>Full Lat Pulldown with overhand grip</strong></td>
<td><strong>Concentration Curls</strong></td>
</tr>
<tr>
<td>Assume normal lat pulldown position. Assume an overhand grip (palms turned downward) with hands slightly less than shoulder width apart. Lean back to a comfortable position. Initiate movement by squeezing shoulder blades together then pull bar down until it touches your chest. Return to starting position.</td>
<td></td>
</tr>
<tr>
<td><strong>Power Clean – Hang Clean from above the knee</strong></td>
<td></td>
</tr>
<tr>
<td>Lift bar off a waist-level rack using a power clean grip. Lower the bar to a position just above the knees with the shoulders slightly in front of the bar. Clean the bar from this position concentrating on proper timing and rack position. Avoid letting the bar “crash” on the shoulders.</td>
<td></td>
</tr>
<tr>
<td><strong>Back Squat</strong></td>
<td></td>
</tr>
<tr>
<td>High bar squat, modified center of gravity bar or stingray</td>
<td></td>
</tr>
<tr>
<td><strong>Shoulder Press Lockout</strong></td>
<td></td>
</tr>
<tr>
<td>Using squat rack or Smith Machine, secure the bar in a front shoulder press <strong>starting position</strong> equal to forehead height. Press from forehead height until arms are fully locked out. Return to starting position.</td>
<td></td>
</tr>
<tr>
<td><strong>Partial Incline Bench Press using underhand grip</strong></td>
<td></td>
</tr>
<tr>
<td>Place a 6 inch towel roll under T shirt</td>
<td></td>
</tr>
</tbody>
</table>
before assuming normal bench press position. Assume a underhand grip (palms turned upward) with hands slightly less than shoulder width apart. The bar is lowered until it touches the towel then pressed to the starting position.

Program Design – 5 sets x 10 reps at 70% of 1 Rep Max

ACROMIOPLASTY WITH DISTAL CLAVICLE RESECTION, ROTATOR CUFF REPAIR (POST OPERATIVE)

Phase III – Exercises

Goals Phase III: Full ROM Shoulder Press and Power Clean
Time Frame: 2 - 4 weeks (Lift 2-3 X/week; 1-2 days rest between workouts; follow soreness rules on page 19)

Accessory Excercises (Phase III):

Chest Flys

Straight Arm Lat Pulldown
Seated rows

Triceps Extensions

Deltoid Raises

Biceps Curls
Step 14

Core Exercises

Standard Bench Press
Standard Lat Pull down
Power Clean
  Lift bar off a waist-level rack using a power clean grip. Lower the bar to a position just above the knees with the shoulders slightly in front of the bar. Clean the bar from this position concentrating on proper timing and rack position. Avoid letting the bar “crash” on the shoulders.

Back Squat
  High bar squat, modified center of gravity bar or stingray

Shoulder Press
  Using a squat rack or Smith Machine place the bar at normal starting position for the front shoulder press. Press to full overhead position and return to start

Incline Bench Press
  Place a 6 inch towel roll under T shirt before assuming normal bench press position. Assume an overhand grip (normal grip) with hands slightly less than shoulder width apart. The bar is lowered until it touches the towel then pressed to the starting position.

Program Design
5 sets x 10 reps at 70% (H)
4 sets x10 reps at 60% (L)

(H) - Heavy Day with emphasis on increased repetitions and increase percentage of (1) repetition maximum.

(L) - Light Day with emphasis on decreased repetitions and decreased percentage of (1) repetition maximum. The rationale is to allow the muscle tissue to rest and recover for the next heavy session.

If the athlete lifts two days per week he/she should complete one heavy and one light day. If the athlete lifted three days per week, here is a sample alternate heavy /light schedule.

<table>
<thead>
<tr>
<th></th>
<th>Day 1</th>
<th>Day 3</th>
<th>Day 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week 1</td>
<td>Heavy</td>
<td>Heavy</td>
<td>Light</td>
</tr>
<tr>
<td>Week 2</td>
<td>Light</td>
<td>Light</td>
<td>Heavy</td>
</tr>
</tbody>
</table>
Accessory Exercises

Chest Flys
Straight Arm Lat Pulldown
Seated Rows
Tricep Extensions with lat pull down machine
Lateral and Front Deltoid Raises
Bicep Curls

Program Design- 3 sets x 8 reps

Step 15

Core Exercises
Standard Bench Press
Standard Lat Pull down
Power Clean
  Resume normal power clean from the floor with emphasis on timing, bar path and proper rack position. Keep the bar close to the body and do not allow the bar to “crash” on the shoulders. In addition, the athlete should be taught to absorb the impact of the bar by bending the knees as the bar is racked on the shoulders.
Back Squat
  High bar squat, modified center of gravity bar or stingray
Standard Shoulder Press
Incline Bench Press
  Assume an underhand grip (palms turned upward) with hands slightly less than shoulder width apart. Complete full bench press using an underhand grip. Concentrate on keeping arms close to the sides.

Program Design
5 sets x 8 reps at 75% (H)
4 sets x 8 reps at 65% (L)

Accessory Exercises

Chest Flys
Straight Arm Lat Pulldown
Seated Rows
Tricep Extensions with lat pull down machine
Lateral and Front Deltoid Raises
Bicep Curls

Program Design- 3 sets x 8 reps
### Step 16

<table>
<thead>
<tr>
<th>Core Exercises</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Standard Bench Press</td>
<td>Chest Flys</td>
</tr>
<tr>
<td>Standard Lat Pull down</td>
<td>Straight Arm Lat Pulldown</td>
</tr>
<tr>
<td>Power Clean – Full ROM from the floor</td>
<td>Seated Rows</td>
</tr>
<tr>
<td>Back Squat</td>
<td>Tricep Extensions with lat pull down machine</td>
</tr>
<tr>
<td>High bar squat, modified center of gravity bar or stingray</td>
<td>Lateral and Front Deltoid Raises</td>
</tr>
<tr>
<td>Standard Shoulder Press</td>
<td>Bicep Curls</td>
</tr>
<tr>
<td>Incline Bench Press</td>
<td>Program Design - 3 sets x 8 reps</td>
</tr>
<tr>
<td>Assume an overhand grip (normal grip) with hands slightly less than shoulder width apart. Complete full bench press using an overhand grip. Concentrate on keeping arms close to the side. Do not allow weight to bounce off chest.</td>
<td></td>
</tr>
</tbody>
</table>

**Program Design**
- 4 sets x 6 reps at 80% (H)
- 4 sets x 6 reps at 70% (L)

### Step 17

<table>
<thead>
<tr>
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<tbody>
<tr>
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<tr>
<td>Standard Lat Pull down</td>
<td>Straight Arm Lat Pulldown</td>
</tr>
<tr>
<td>Power Clean – Full ROM from the floor</td>
<td>Seated Rows</td>
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<tr>
<td>Standard Shoulder Press</td>
<td>Bicep Curls</td>
</tr>
<tr>
<td>Incline Bench Press</td>
<td>Program Design - 3 sets x 8 reps</td>
</tr>
</tbody>
</table>

**Program Design**
- 4 sets x 5 reps at 85% (H)
- 3 sets x 5 reps at 75% (L)
**Soreness Rules**

<table>
<thead>
<tr>
<th>Criterion</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Soreness during warm-up that continues</td>
<td>2 days off, drop down 1 step</td>
</tr>
<tr>
<td>2. Soreness during warm-up that goes away</td>
<td>Stay at step that led to soreness</td>
</tr>
<tr>
<td>3. Soreness during warm-up that goes away but redevelops during session</td>
<td>2 days off, drop down 1 step</td>
</tr>
<tr>
<td>4. Soreness the day after lifting (Not muscle soreness)</td>
<td>1 day off, do not advance program to the next step</td>
</tr>
<tr>
<td>5. No soreness</td>
<td>Advance 1 step per week or as instructed by healthcare professional</td>
</tr>
</tbody>
</table>