Protective and Preparative Phase

0-6 weeks post op

Range of Motion

- Postural education
- The patient uses a sling / shoulder immobilizer for 6 weeks, with external rotation restricted to 0 degrees.
- Passive elbow and active and passive wrist/hand range of motion at home.

Strength

- Scapular squeeze and clocks
- Lumbopelvic
- Grip strengthening

Cardiovascular

- With sling / shoulder immobilizer
 - o Recumbent bike

Progressive Phase

6-12 weeks post op

Range of Motion

- After 6 weeks, the sling is discontinued, and overhead motion is encouraged progressing forward flexion.
- Gentle external rotation stretching is begun at 6 weeks post-operative, with the goal that at 3 months postoperative external rotation of the operated shoulder will be half of that on the opposite shoulder.

Strength

- Scapular squeeze and clocks
- Lumbopelvic
- Grip strengthening

Cardiovascular

• Recumbent bike

Performance Phase

12-24 weeks post op

Range of Motion

- Soft tissue work, joint mobilizations, stretching prn
- Continue progressing with external rotation of the operated shoulder to equal that of the opposite shoulder.

Strength

- At 3 months post-operative, the patient begins strengthening with TheraBands.
- Begin light resisted ER, forward flexion and abduction
- Begin resisted internal rotation, extension and scapular retraction
- At 6 months, the patient may progress to weightlifting in the gym if the graft remains in good position and shows signs of consolidation.

Cardiovascular

- Elliptical machine
- Upright stationary bike
- Treadmill
- May progress with running and impact at 16-24 weeks if X-Ray shows evidence of healing

Contact sports or heavy labor is generally allowed when the bone graft appears radiographically healed and not before 9 to 12 months postoperative.