

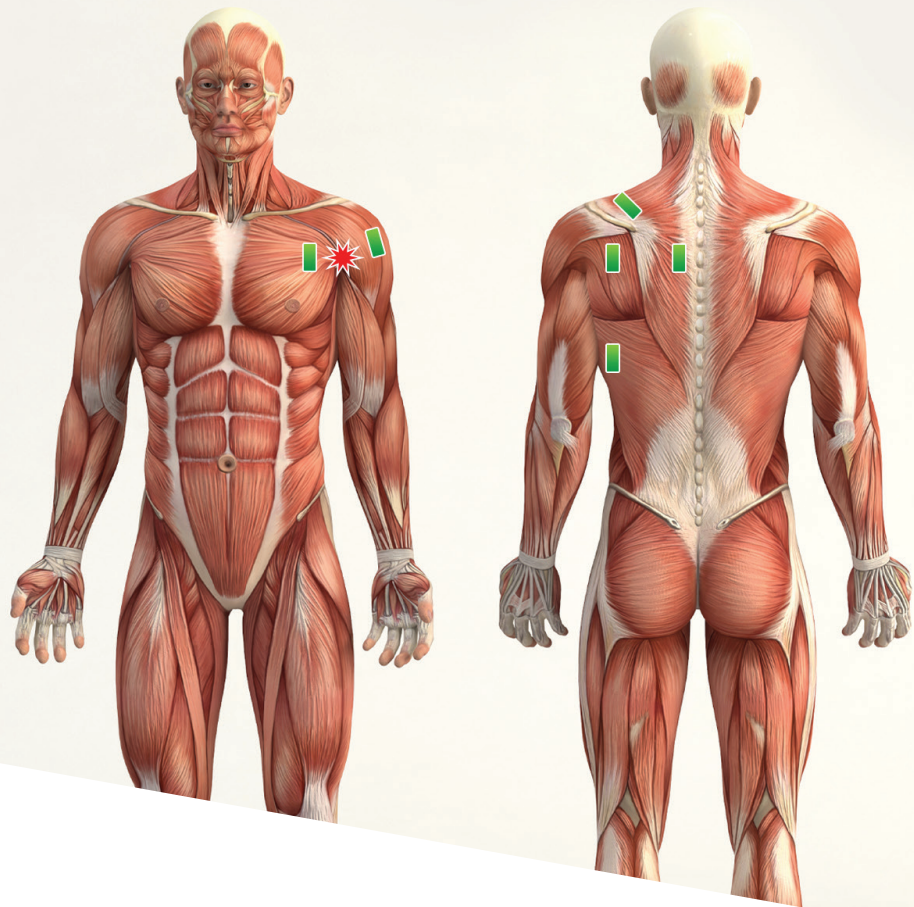
# CASE STUDY

38 Year Old Male with Pec Tendon Tear & Surgery

*PERFORMED AT:  
Competitive Edge Physical Therapy  
in Tampa, Florida using  
the NeuFit Method.*

## DIAGNOSIS:

**Left Pectoralis Tendon Avulsion Rupture, Surgery required to repair/reattach, Expected 6-8 months recovery to return to pre-injury activity levels.**



## TREATMENT AND OUTCOME:

Patient performed one NeuFit session before surgery, and 32 NeuFit sessions over 4 months post-surgery. All sessions were performed at Competitive Edge Physical Therapy in Tampa, FL. The treatments began with the NeuFit Mapping Process, wherein the patient was scanned for sites of neurological dysfunction, and then those sites were treated with the Neubie® device. These sites of neurological dysfunction are identified by scanning an electrode across the patient's body and observing the patient's reaction to the unique stimulation current of the Neubie®. Where there is dysfunction, such as the hypersensitivity associated with guarding after a traumatic injury or surgery, the body will fight strongly against this electric signal and it will feel significantly different to the patient. Once these spots are found, they are stimulated in combination with various movements and corrective exercises. During the course of treatment, stimulation was given at the sites shown in green on the image above. The Red mark shows the site of Tendon rupture. The patient's progress is shown in the table.

(L) Shoulder Measurement	Initial Evaluation Pre-Surgery	Visit #16, Mid-Point (2 month Post-Surgery)	Visit #32, Final Session (4 months Post-Surgery)
<b>Flexion P.R.O.M.</b>	150°	160°	180°
<b>Abduction P.R.O.M.</b>	90°	180°	180°
<b>Ext. Rot. P.R.O.M.</b>	80°	90°	90°
<b>Int. Rot. P.R.O.M.</b>	70°	85°	85°
<b>Manual Muscle Test</b>	WFL except adduction & I.R. at 4-/5 with guarding	WFL except adduction & IR at 4/5 with guarding	Adduction & I.R. at 5/5, painless
<b>Comments</b>	Swelling, very limited mobility, ecchymosis	No swelling or pain, almost full ROM	Full ROM and strength near pre-injury levels

<sup>1</sup> PROM = Passive Range of Motion

<sup>2</sup> WFL = "Within Functional Limit", or sufficient for activities of daily living but not even with other side

## DISCUSSION:

Pre-Surgery - Even before the surgery and subsequent recovery, the one pre-op treatment had a remarkable effect. Going into this first treatment, the patient had 8/10 pain that prevented him from performing virtually any movements with the left arm and was disrupting his sleep. After one session, his pain went down to a 1-2 out of 10, and he could lift his arm overhead, even performing a full "jumping jack" with no increase in pain. His surgeon was also very surprised by the tone of the patient's muscles during the repair. Typically, with an injury of this severity, there is so much protective contraction that it is difficult to pull the tendon to its site of reattachment. The surgeon was pleased to see that the tissues were much more pliable, and he was able to move the tendon to its attachment site with much greater ease.

Post-Surgery - At the 3.5-month mark, the patient was able to perform multiple bench press repetitions at 185 lbs, DB military presses, push-ups without any pain. He was back to his pre-injury level of function in virtually all measures, except that he was using slightly reduced loads on the bench press. The patient's surgeon commented that the patient was at least three months ahead of schedule compared to the average recovery time for this surgery.

**The patient's therapists believe that his recovery was so far ahead of schedule because of the unique effects of the Neubie® device and its ability to accelerate the process of neuromuscular re-education.**