



## International Journal of PharmTech Research

CODEN (USA): IJPRIF, ISSN: 0974-4304, ISSN(Online): 2455-9563  
Vol.9, No.6, pp 115-126, 2016

### Efficacy of Shockwave Therapy in Treatment of Myofascial Trigger Points of Rotator Cuff Muscle Dysfunction

Samah A. Ali<sup>1\*</sup>, Yasser R. Lasheen<sup>1</sup>, Ragia M. Kamel<sup>1</sup>, Ahmed F. Genaidy<sup>2</sup>

<sup>1</sup>Department of Basic Sciences, Faculty of Physical Therapy, Cairo University, Egypt.

<sup>2</sup>Manger of Agouza Rehabilitation Center, Cairo, Egypt

**Abstract :** The purpose of this study was to examine the effect of shock wave therapy in treatment of myofascial trigger points of rotator cuff muscle dysfunction in which Myofascial trigger points are recognized by many clinicians to be one the most common cause of pain and dysfunction in musculoskeletal system. **Subjects:** Thirty patients diagnosed as shoulder pain including cases of rotator cuff tendinitis. **Methods:** Patients were randomly distributed into two equal groups. The first group (control) consisted of 15 patients with a mean age of 34.67(± 5.95) years received traditional therapy (ultrasound (1 MHZ, Continuous Pulse for 5 minute) for 12 sessions, 3 session /week. The second group (study) consisted of 15 patients with a mean age of 34.07 (± 4.51) years received shock wave therapy (6000 shocks, 2000 shock/ session, 3 session one week apart , energy flux density 0.38 mJ/mm<sup>2</sup>, 1.6 bar and 10HZ) In addition to traditional therapy . Patients were evaluated pretreatment and post treatment for shoulder pain intensity, pressure pain threshold of myofascial trigger points, shoulder flexion, abduction, extension, external and internal rotation motions. **Results:** Patients of both groups showed significant improvement in all the measured variables. Between groups difference the shock wave group showed a significant improvement in decreasing pain intensity, increasing pressure pain threshold and improving shoulder range of motion than control group. **Conclusion:** Both shock wave and the traditional treatment had a significant effect on decreasing shoulder pain intensity, increasing pressure pain threshold and increasing in shoulder flexion, extension, abduction, external and internal rotation motions. However, the shockwave therapy was more effective than traditional therapy in treatment of myofascial trigger points of rotator cuff muscle dysfunction.

**Keywords:** Myofascial trigger points, shock wave therapy, and rotator cuff muscle dysfunction.