



## **The relationship between latent trigger points and depression**

### **Summary**

A study published in the journal *Clinical Rheumatology* investigated the prevalence of latent (pain free) myofascial trigger points (MTPs) in the scapular muscles of apparently healthy pain free adults, and whether they were associated with depression. The trigger point examination found that 60% of the apparently normal people had one or more trigger points in these muscles. When assessing for symptoms of depression they found that in general the more latent trigger points the more depression symptoms. Those with no latent trigger points showed very few symptoms of depression, while those with five or more latent trigger points questionnaire results placed them well within the clinical depression range.

### **Trial details**

#### ***Subjects***

The subjects were 76 students and health care workers who had no neck, shoulder or thoracic pain, had no surgery or physical therapy in that region, and were not undergoing psychiatric treatment.

#### ***Muscles examined***

The muscles assessed were the upper and middle trapezius, serratus anterior, and rhomboideus major and minor.

#### ***Measurement of depression***

The level of depression symptoms was assessed using a questionnaire called the Beck Depression Inventory. When assessing the general population a score of 21 or over represents depression.

#### ***Results***

##### **Prevalence of trigger points**

60% of subjects had one or more latent MTPs in the muscles examined.

### Relationship with depression

Based on the number of latent MTPs found each subject was allocated into one of three groups:

#### Group one

- (30 subjects) having no latent MTPs
- Average depression score= 8

#### Group two

- (28 subjects) having 1-5 latent MTPs
- Average depression score= 10.3

#### Group three

- (18 subjects) having more than 5 MTPs
- Average depression score 28.5 (clinical depression is 21 and above)

It is very clear that in these pain free subjects those having a large number of trigger points also had very high depression scores.

### *Clinical implications*

#### The association with depression

The research showed that in the asymptomatic people tested the higher the number of trigger points the higher the depression score tests, and visa versa. This indicates that they go together, but not causes which. The authors confirm this unknown by stating that the relationship between latent trigger points, anxiety, stress and depression is not fully understood. The authors speculated that depression may be a cause of latent trigger points, and hence stress and depression management may be considered as a treatment for latent trigger points. This may be correct. However, there are two other possibilities to consider.

- Firstly, latent trigger points may somehow cause depression. If that was the case trigger point therapy should be considered as a treatment for depression rather than visa versa.
- The second possibility is that there could be another issue that is a common cause of both trigger points and depression. A hypothetical example may be that a boring job that involves repeated mundane tasks with poor ergonomics. This could cause both trigger points and depression.

#### Facts we can use

The only thing that we can be certain of from this research is that latent trigger points are relatively prevalent in asymptomatic people, and that trigger points and depression tend to go together. The practical implications from this are as follows.

- When someone has depression (or depression symptoms) screening for trigger points should be considered.
- If someone has a high number of trigger points an assessment for depression should be considered.
- Regular screenings for trigger points seems wise due to their high prevalence, the possibility of them causing depression, and their proven potential to cause dysfunction and chronic pain syndromes.

### *Reference*

Çelik, D., & Mutlu, E. K. (2012). *The relationship between latent trigger points and depression levels in healthy subjects. Clinical Rheumatology*, 31(6), 907–911. <https://doi.org/10.1007/S10067-012-1950-3>

***DrGraeme Massagers***  
***331 Main St Bairnsdale (P.O. Box 914)***  
***Bairnsdale Victoria 3875 AUSTRALIA***  
***Phone: (Australia) (03) 51161298 (Overseas) +61351161298***  
***Website: [www.drgraeme.com](http://www.drgraeme.com)***  
***Email: [graeme@drgraeme.com](mailto:graeme@drgraeme.com)***