

## ORAL PRESENTATION 1-1

통증 및 근골격재활

발표일시 및 장소: 10 월 18 일(금) 13:25-13:35 Room A(5F)

### OP1-1-1

#### **Sonography-guided trigger point injections in abdominal myofascial pain syndrome**

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#### **OBJECTIVE**

To investigate the clinical characteristics of abdominal myofascial pain syndrome, an uncommon phenomenon which may result in multiple hospital visits with negative diagnostics tests and to assess the effect of sonography-guided trigger point injections.

#### **METHODS**

A total of 102 patients with abdominal myofascial pain syndrome from 2012 to 2018 were evaluated retrospectively. During the initial visit, patients reported pain duration, other associated symptoms, the number of hospital visits, and diagnostic tests performed in other hospitals. Abdominal myofascial pain syndrome was diagnosed with the Greenbaum's criteria, and the patients scored their amount of abdominal pain on a visual analogue scale (VAS) from 0 to 10 during each visit. The sonography-guided injection was performed by a single physiatrist. If the symptomatic area was central, 1~2cc lidocaine was injected once into rectus abdominis muscle, and in lateral regions, 1~2cc lidocaine was injected twice into external oblique and internal oblique muscles. VAS ratio was calculated comparing the baseline VAS score and the subsequent score after an injection during the next visit, and the patients were divided into four groups: non-responder (if the ratio was negative to zero), mild responder (if the ratio was 1 to 24%), moderate responder (if the ratio was 25 to 49%), and good responder (if the ratio was higher than or equal to 50%). If the symptomatic area changed during the follow-up visit, the injection site targeted the painful region, and this change was also recorded.

#### **RESULTS**

The median duration of pain was 12 months, and the median number of hospital visits before the trigger point injection was two. The patients underwent approximately two diagnostic tests including either endoscopy or abdominal imaging (abdominal x-ray or CT). Sixty seven patients were categorized into good responders, 12 into moderate responders, 7 into mild responders, and 16 into non-responders. Comparing the initial and final VAS scores, the trigger point injection was found effective in alleviating pain regardless of the

number of injections ( $p < 0.001$ ) (Fig.1). Moreover, patients who received more than two injections tended to show more significant pain reduction than those with twice or fewer injections ( $p < 0.001$ ) (Fig.2). None of the patients reported any adverse events after the injections.

## CONCLUSION

Patients with abdominal myofascial pain syndrome suffer from a long duration of pain and many hospital visits and diagnostic tests. The sonography-guided trigger point injection with lidocaine can be an effective and safe treatment for patients with chronic abdominal myofascial pain syndrome.

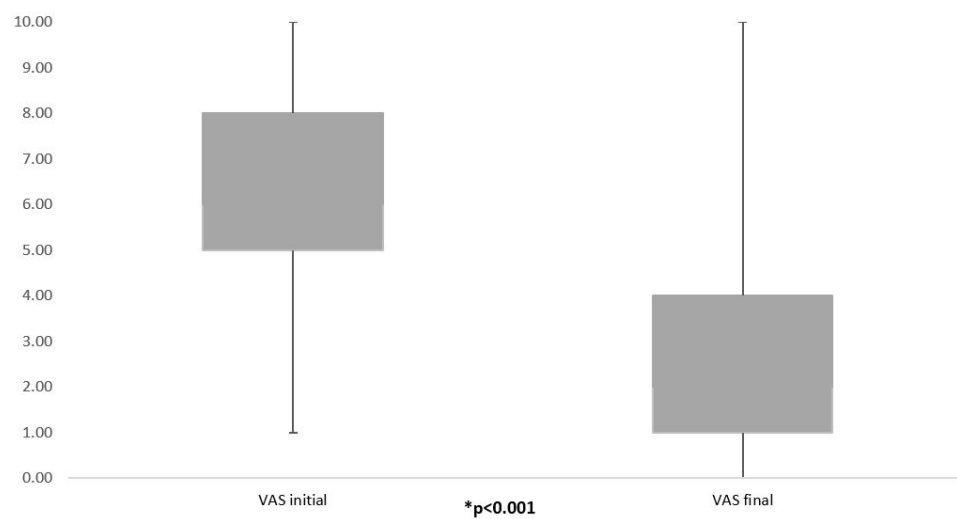


Fig 1. Improvement in VAS pain score after trigger point injections

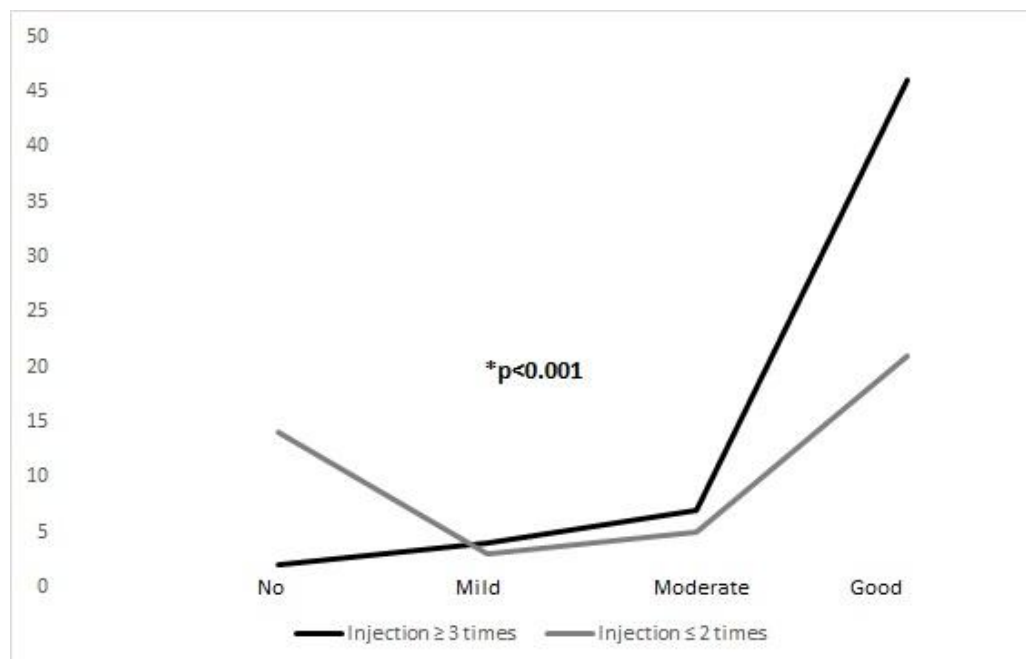


Fig 2. Difference in improvement between patients who received more than two injections and those with twice or fewer injections