Successful Treatment of Abdominal Wall Myofascial Pain

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CASE DESCRIPTION

A 40 year old overweight male presented to the outpatient sports medicine clinic with constantly aching right flank and “hip” pain for 1.5 years. His pain had no relationship to food or bowel function. He denied trauma.

He had failed treatment with NSAIDS, physical therapy, sacroiliac joint injections, and duloxetine. Over the preceding 3 months, his pain migrated towards the right lower quadrant and became increasingly frequent, preventing his participation in recreational activities.

MRI lumbar spine, MRI pelvis, CT abdomen and pelvis, abdominal US, and musculoskeletal US showed no clear etiology of the pain. A colonoscopy also revealed no etiology for the continued pain.

A diagnosis of myofascial pain was made, and the patient underwent a trial of trigger point injections in the outpatient clinic. A total of 3 cc’s of 0.5% Lidocaine were injected into the external and internal oblique muscles under ultrasound guidance at the site of greatest tenderness. The patient achieved 100% pain relief immediately post-procedure. Relief lasted for 1 day and then returned to baseline.

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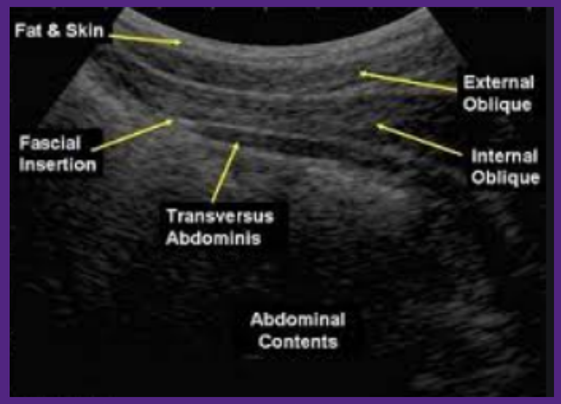
IMAGING



(Low-frequency curvilinear transducer placed in the transverse plane on the abdomen at the anterior axillary line between the costal margin and the iliac crest.)

Abdominal Wall Pain

- Constant, nagging pain
- Positive Carnett’s sign
- Typically smaller area of pain (<2 cm)
- Can be on lateral edge of rectus abdominis
- Tends to be sharp in nature

Visceral Disease

- Nausea
- Vomiting
- Weight loss
- Changes in bowel habits
- Abnormalities on hepatic lab tests
- Bleeding
- Anemia
- Fever

Carnett’s sign:
The examiner palpates the most tender point.
A positive sign is if tenderness is increased when muscles are tensed.

DISCUSSION

There may be multiple causes of musculoskeletal abdominal wall pain. Cutaneous nerve roots are susceptible to stretching or compression as they pass through the abdominal wall and course along the abdominal fascia. Tight clothing, a protuberant abdomen, or weight fluctuations may irritate nerve roots. Dysfunction may also occur where tendons insert on bones or cartilage.

Patients may present with tender trigger points, often found on the attachment sites of muscle or fascia and the lateral border of the rectus abdominis. Stimulation of trigger points on exam can lead to referral of pain over a large area.

CONCLUSION

Abdominal wall myofascial pain is an overlooked diagnosis that may result in time-consuming investigations and expensive imaging which can increase the burden of disease and diminish patient satisfaction.

Intramuscular injection of local anesthetic with ultrasound guidance may serve as both a diagnostic and therapeutic intervention with minimal risk. Further research is needed to identify what placebo effect exists, if any.

In addition, physical therapy with stretching, topical anesthetics, and heat/cold modalities may help relieve symptoms.

Patient counseling is vital to reduce morbidity, diminish anxiety, and prevent further unnecessary diagnostic tests.