

CASE REPORT

Thoracic Facet Arthropathy Presenting with Pain Abdomen: An Unusual Presentation

¹Shane Meraj, ²Gautam Das

ABSTRACT

This case report is about a patient with thoracic facet arthropathy presenting with abdominal pain, who underwent multiple investigations and treatment for abdominal visceral conditions with no relief of his pain. A 29 years male presented to our pain clinic with episodic, severe left chest wall, and upper abdominal pain. In the last 4 years, he had been treated for various abdominal visceral conditions. He was then diagnosed as a case of intercostal neuralgia and 12th rib (the twelfth rib syndrome). He was treated with anticonvulsants and antidepressants, as well as intercostal nerve block, tender point injection and intercostal nerve radiofrequency (RF), but with partial relief. Careful history and clinical examination revealed left lower thoracic facet joint involvement. Diagnostic block of medial branch of left 10, 11 and 12th thoracic dorsal rami was done with 90% pain relief. This case emphasises that in any case of abdominal pain, spine should be examined because referred pain from spine can be an important etiology of pain abdomen. Careful history, examination and appropriate investigations should be done to rule out abdominal pathologies, and to arrive at a diagnosis. A thorough history, meticulous examination, and diagnostic blocks if required are very important to localize the pain generators.

Keywords: Abdominal pain, Diagnostic block, Intercostal neuralgia, Thoracic facet arthropathy.

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INTRODUCTION

Thoracic facet arthropathy can be a result of inflammatory, degenerative or traumatic damage to the facet joint. Symptoms will depend on the level of the facet joint affected. Pain from facet joints can be dull aching to sharp and stabbing. Pain is typically in the paravertebral region. Thoracic facet pain can also be referred to chest and upper abdomen on the ipsilateral side. Symptoms are worse with extension and rotation of the spine.^{1,2}

¹Fellow, ²Director

^{1,2}Daradia: The Pain Clinic, Kolkata, West Bengal, India

Corresponding Author: Shane Meraj, Fellow, Daradia: The Pain Clinic, Kolkata, West Bengal, India, e-mail: drshan2008@gmail.com

Intercostal neuralgia is neuropathic pain involving the chest wall. Damage or inflammation of the intercostal nerves is usually the underlying pathology. Patient usually presents with a constant burning pain that starts at posterior axillary line and radiates anteriorly to the distribution of the affected intercostal nerves or the subcostal nerve of the 12th rib (the twelfth rib syndrome).³

Abdominal pain results from gastrointestinal diseases and extraintestinal conditions involving the genitourinary tract, abdominal wall, thorax, or spine. Pain originating from the abdominal viscera is poorly localized, usually midline and vague in character, while parietal pain is localized and precisely described. On examination patients with visceral pain will have generalized discomfort.⁴

CASE REPORT

A 29 years male patient presented to our pain clinic with a history of pain abdomen for past 4 years. Pain was in the left upper abdomen and mid back. It was episodic pain, of severity 8/10 on visual analog scale (VAS), with burning character. Each episode lasted for 15 to 30 days, followed by few days when patient had no pain. Patient was relatively comfortable on sitting and extension produced pain. Radiation of pain was from abdomen to back. There was no radiation to the right side of abdomen.

Initially, he was treated with proton pump inhibitors in February 2012, but with no relief. Then he was treated for chronic pancreatitis and various investigations were done. Ultrasonography (USG) and computed tomography (CT) whole abdomen were normal except for enlarged mesenteric lymph nodes. Diagnostic laparoscopy was done for enlarged mesenteric lymph nodes, and appendicectomy was done. As pain persisted after all these, he was further investigated by upper gastrointestinal (GI) endoscopy and colonoscopy, which came to be normal. Tissue transglutaminase level was normal. Then he underwent CT thorax and magnetic resonance imaging (MRI) of abdominal wall, which were all normal. He also underwent mantoux test and adenosine deaminase level which were normal. Serum amylase and lipase level were also normal. Magnetic resonance imaging of the spine was within normal limits.

In 2014, he was diagnosed as a case of intercostal neuralgia or 12th rib syndrome and was treated with

oxcarbamazepine, pregabalin, and amitriptyline. Then he underwent intercostal nerve block and radiofrequency (RF) of intercostal nerve, with partial relief.

On careful examination, there was tenderness at left thoracic facets at D10, 11 and 12 level. Diagnostic medial branch block was done and patient reported 90% pain relief after diagnostic block.

DISCUSSION

Pain abdomen can be a manifestation of various pathologies. Besides pain from gastrointestinal diseases and extraintestinal conditions involving the genitourinary tract, abdominal wall and thorax, referred pain from chest wall and spine is also an important cause of pain abdomen.⁴ Hence, for every case of abdominal pain, with no obvious abdominal etiology on examination and investigation, spine should be examined.

Facet joint pain typically manifests with paravertebral lower back pain, exacerbated by twisting or rotational motion, and extension, and relieved by flexion. It is usually diagnosed by history and clinical examination, with pain on extension and rotational movement. Area of maximum tenderness on palpation over the facet joint helps in clinical diagnosis.¹ The area of most intense pain is usually one segment below and slightly lateral to the involved joint and never crossed the midline.²

In a study, thoracic facet was responsible for 6% of all cases of the spinal pain.⁵ Diagnostic block is important for diagnosis as clinical X-rays do not correlate well with clinical symptoms. Computed tomography and MRI changes also do not correlate well with symptoms.¹

Pain from spine is referred outwards and downwards from its source, in predictable patterns, as far anteriorly as the anterolateral chest and abdomen. The pain is usually felt as deep and dull. It can be aching, and is diffuse in its distribution.⁶

Patients with spine pathology can present with vague extraspinal symptoms and if the clinician is not aware it can lead to misdiagnosis, with progression of the disease. It can lead to unnecessary invasive, and expensive diagnostic tests and extensive medical and surgical workup.^{7,8} Though thoracic spine problems are a rare cause of pain abdomen but the clinician should be aware of it while forming a diagnosis.⁹

REFERENCES

1. Aniq H, Campbell R. Fluoroscopy. In: Waldman SD, editor. Pain Management. 2nd ed. Philadelphia: Elsevier Saunders; 2011.
2. Nelson JW. Thoracic Facet Joint Blocks and Neurotomy. In: Prithviraj P, editor. Interventional Pain Management: Image-Guided Procedures. 2nd ed. Philadelphia: Elsevier Saunders; 2008.
3. Waldman SD. Chest wall pain syndrome. In: Waldman SD, editor. Pain Management. 2nd ed. Philadelphia: Elsevier Saunders; 2011.
4. Hasler WL, Owyang C. Approach to patients with gastrointestinal disease. In: Harrison's Principles of Internal Medicine. 18th ed. New York: McGraw-Hill; 2011.
5. Manchikanti L, Boswell MV, Singh V, Pampati V, Damron KS, Beyer CD. Prevalence of facet joint pain in chronic spinal pain of cervical, thoracic, and lumbar regions. BMC Musculoskelet Disord 2004;5:15.
6. Zaki SA, Shanbag P, Lad V. Abdominal pain as a presenting feature of spinal tuberculosis in a child. Ann Saudi Med 2011;31(5):550-551.
7. Shirzadi A, Drazin D, Jeswani S, Lovely L, Liu J. Atypical presentation of thoracic disk herniation: case series and review of the literature. Case Reports in Orthopedics 2013 Apr;2013(2):621976.
8. Ozturk C, Tezer M, Mustafa S, et al. Far lateral thoracic disc herniation presenting with flank pain. Spine J 2006;6(2):201-203.
9. Papadakos N, Georges H, Sibtain N, Tolia M. Thoracic disc herniation presenting as abdominal pain: case report and review of literature. Annals of Royal College of Surgeons in England 2009;91(5):W4-W6.

