

## Case Report

### IDIOPATHIC MONDOR'S DISEASE: A CASE REPORT

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Submitted on: February 2017  
Accepted on: February 2017  
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#### Abstract

Mondor's disease is a rare condition characterized by superficial thrombophlebitis of subcutaneous veins of the anterior chest wall. Trauma, infections, cancer and excessive physical activity are some of the predisposing factors. This is a case of a young male who presented with an acute onset right sided chest pain with a tender vertical cord like swelling over the right anterior chest wall and was diagnosed to have Mondor's disease. However, he did not have any of the usual triggering factors.

**Keywords: Mondor's disease, superficial thrombophlebitis**

#### Introduction

Mondor's disease (MD) is characterized by superficial thrombophlebitis of the subcutaneous veins of the anterior chest wall. It is a rare condition and typically affects middle-aged women. It presents as sudden onset chest wall pain. Clinically, subcutaneous, tender cordlike induration is visible. Trauma, excessive physical activity, surgery, infections, cancer are some of the predisposing factors. In this case, the patient is a middle-aged male who presented with MD in the absence of any triggering factors.

#### Case Report

Our patient is a 47 year old male working as an accountant. He presented with a history of right sided chest pain for the past 10 days

which was acute in onset and progressive with no radiation. He did not have any comorbid condition and was not on any regular medications. He did not have any history of trauma, fever or exertional physical activity. On examination, he had a tender vertical cord like subcutaneous swelling over the right anterolateral chest wall (Figure 1). His vitals and systemic examinations were normal. His blood investigations like complete blood count, renal and liver functions, electrolytes, C-reactive protein, aPTT and PT/INR were normal. ANA profile, anti-CCP, p and c ANCA were negative. Viral markers for HIV, hepatitis B, and C were also negative. Doppler study of right anterior chest wall was suggestive of superficial

thrombophlebitis with thrombus formation. Electrocardiogram, echocardiogram, computed tomography of thorax and abdomen were normal. He had symptoms of epigastric burning sensation for which upper gastrointestinal endoscopy was done 2 months ago which revealed antral gastritis.

He had an MRI brain done 1 month ago, from an outside hospital for a headache, which was normal. He has treated with injection enoxaparin (40 mg subcutaneous twice daily), ibuprofen, pantoprazole and hot fomentation. After 1 week of therapy, he was asymptomatic and discharged.

**Figure 1.** Superficial thrombophlebitis of right anterior chest wall veins



### Discussion

MD was first described by Henri Mondor in the year 1939<sup>[1]</sup>. It is a benign, self-limiting condition and classically involves the subcutaneous veins of the anterior chest wall i.e. superior epigastric, Thoracoepigastric and lateral thoracic vein. MD involving the dorsal superficial veins of the penis has been reported<sup>[2]</sup>. The condition affects mainly women, with a peak incidence at the age of 43<sup>[3]</sup>. An estimated 1% incidence has been noticed following breast cancer surgery and aesthetic mammoplasties<sup>[4]</sup>. The pathogenesis of MD is still unclear. Vessel wall damage due to pressure or trauma, stagnation of blood and

hypercoagulable states are some of the proposed mechanisms<sup>[5,6]</sup>. Another hypothesis is the repeated contraction and relaxation of the pectoral muscles, which causes constant stretching and relaxing of the veins<sup>[7]</sup>. Some of the predisposing conditions noticed are excessive physical activity, fever, mastitis, rheumatoid arthritis, tight inner wears, pregnancy and oral contraceptive pills<sup>[8]</sup>. An association between MD and infections like hepatitis C and herpes zoster have also been observed<sup>[9,10]</sup>. A relationship between the incidence of breast cancer and MD has also been described<sup>[11]</sup>.

The diagnosis is made on clinical grounds with the appearance of subcutaneous tender, usually, unilateral cord like swelling and Doppler study is the imaging modality of choice <sup>[12]</sup>. The treatment is mainly with nonsteroidal anti-inflammatory drugs. The use of anticoagulants remains controversial. The American College of Chest Physicians recommend prophylactic or intermediate doses of low-molecular-weight heparin for at least 4 weeks in the treatment of superficial thrombophlebitis without concomitant addition of non-steroidal anti-inflammatory drugs, but no clear guidelines have been explained with regard to MD <sup>[13]</sup>.

### Conclusion

As mentioned earlier, MD is a rare entity. The lack of awareness of the condition may also contribute to its underdiagnosis. Most of the cases reported had a predisposing factor, either in the form of excessive physical activity or infection or cancer. Our patient developed MD without any identifiable cause; giving rise to the possibility of a primary or idiopathic MD.

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