An unusual case of chest pain: ultrasonographic diagnosis of Mondor’s disease

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Abstract

Mondor’s disease is characterized by superficial thrombophlebitis affecting the subcutaneous veins, especially those of the anterolateral thoracoabdominal wall. Thrombophlebitis is usually a subcutaneous, tender, painful cord-like induration, usually found in the breast or the axilla. It typically affects middle-aged women. Thus, we believe the case of a 48-year-old male patient admitted to the emergency room for chest pain with a palpable, non-erythematos and painful cord-like structure localized in the anterior chest wall and the abdomen to be of interest. He had had a mild thoracic trauma. Doppler analysis showed a thrombosis of the superficial vein of the thorax. The patient was treated by Fondaparinux Sodium 2.5 mg subcutaneously per day for 30 days. Evolution was favorable. Although uncommon, Mondor’s disease has to be recognized to avoid useless diagnosis testing and to deliver a specific treatment.

Introduction

Mondor’s disease is an unusual form of superficial thrombophlebitis affecting the subcutaneous veins, particularly those of the anterolateral thoracoabdominal wall. Even if the first report was that of Faage in 1869,1 it was characterized by Henri Mondor, a French surgeon in 1939.2 Although Mondor’s disease is rare, it is believed to be more common than reported.1 Patients sometimes do not seek medical care because it is a benign and self-limiting disease. Thus, we believe the case of a male patient admitted to the emergency room (ER) for chest pain and diagnosed as having Mondor’s disease to be of interest.

Case Report

A 48-year-old male patient was admitted to ER for chest pain with a palpable, non-erythematos and painful cord-like structure extending from the right side of the anterolateral chest wall to the right iliac fossa (Figure 1); this lesion appeared about five days after a mild trauma of the thorax while the patient was at work. The past medical history was unremarkable apart from an appendectomy at the age of 12 years. He was not a drug addict and was not on any medication. He had no fever, the arterial pressure was normal as were both the cardiac and the respiratory rates. Physical examination of the abdomen was normal as were the respiratory, cardiac and neurological examinations. There was no clubbing, cyanosis or edema of the extremities. An electrocardiogram showed no alterations. Biochemical examinations were normal and no alterations of coagulation tests were detected; there was also no deficiency of protein S, protein C or antithrombin III, nor the presence of anticardiolipin antibodies. A chest X-ray was carried out showing no alteration of the lungs, the absence of pleural fluid collections and a normal cardiac silhouette. Ultrasonography showed a hypoechoic tubular structure with a thrombus occluding the vessel examined; this picture was compatible with superficial thrombophlebitis (Figure 2). These findings were confirmed at Doppler analysis, showing the absence of a flow in this abnormal tubular structure (Figure 3) which showed thrombosis of the superficial vein of the chest wall. The patient was treated with fondaparinux sodium at a dosage of 2.5 mg per day subcutaneously for 30 days and with nonsteroidal anti-inflammatory drugs (NSAIDs). The results were favorable and the lesion disappeared rapidly as did the chest pain, which was also demonstrated by ultrasonographic examination (Figure 4).
When this treatment is not sufficient for healing or when the disease recurs, a thrombectomy or superficial vein resection is carried out.6 Mondor’s disease is not usually a risk factor for recurrent thrombophlebitis; this event is very rare and can be found in about 3% of cases. However, superficial thrombophlebitis has been reported in association with deep-vein thrombosis. The association with other thrombotic events such as pulmonary embolism, coronary syndromes or stroke, are also very uncommon events in a rare illness such as Mondor’s disease.3 It is important to keep in mind that Mondor’s disease can present as isolated phlebitis or as part of a generalized superficial thrombophlebitis.18

Conclusions

In conclusion, we should be aware of this condition not only in females but also in male patients having persistent chest pain; diagnosis can be achieved by a simple physical examination which can easily be confirmed by external ultrasonography.

References