
MAMMOGRAPHIC AND SONOGRAPHIC FEATURES OF MONDOR'S DISEASE

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ABSTRACT

Mondor's disease, or superficial thrombophlebitis of the breast, is an uncommon condition. It has been associated with benign causes including direct trauma, operative trauma, extensive physical activity, and rarely with breast carcinoma. The disease is usually self-limiting. Mammographic and sonographic findings of two cases of Mondor's disease are presented. Familiarity with this condition will help to avoid unnecessary biopsy.

Key words; Mondor's disease, breast, mammography, sonography.

INTRODUCTION

Mondor's disease is a rare, benign, thrombophlebitis of the subcutaneous vein on the antero-lateral thoracoabdominal wall, usually in or near the breast.¹ The disease has been associated with direct trauma, breast surgery, extensive physical activity,^{2,3} and rarely with breast carcinoma.⁴⁻⁶ The cord of the thrombosed superficial vein is usually both visible and palpable. When unrecognized, it may result in an unnecessary recommendation for biopsy. Familiarity with its clinical and radiographic findings is essential and helps to avoid unnecessary biopsy.

We present two cases of Mondor's disease.

CASE REPORT;

Case 1:

A 36 year-old woman noticed a non-tender mass in her left breast for 4 days. She denied any medication or trauma. Physical examination revealed a rope-like mass in the upper outer quadrant of the left breast with no axillary mass.

Mammograms demonstrated a 5-cm, rope-like lesion in the upper outer quadrant of the left breast (fig.1). Ultrasonography revealed a superficial hypoechoic tubular structure (fig 2). An anti-inflammatory drug was given, and the mass completely resolved in 2 weeks.

Case 2:

A 34 year-old-woman recognized a non tender mass in her right breast 1 week before coming to the hospital. She had taken hormonal supplement for 6 months after her transabdominal hysterectomy and bilateral salpingo-oophorectomy. Physical examination revealed a cord-like mass in the upper outer quadrant of the right breast with minimal skin retraction. No axillary mass was palpable. Mammograms revealed a 4-cm, longitudinal, superficial, tubular shaped lesion in the upper outer quadrant of the right breast. Ultrasound showed a hypoechoic cord-like lesion. The mass completely disappeared in 2 weeks without any treatment.

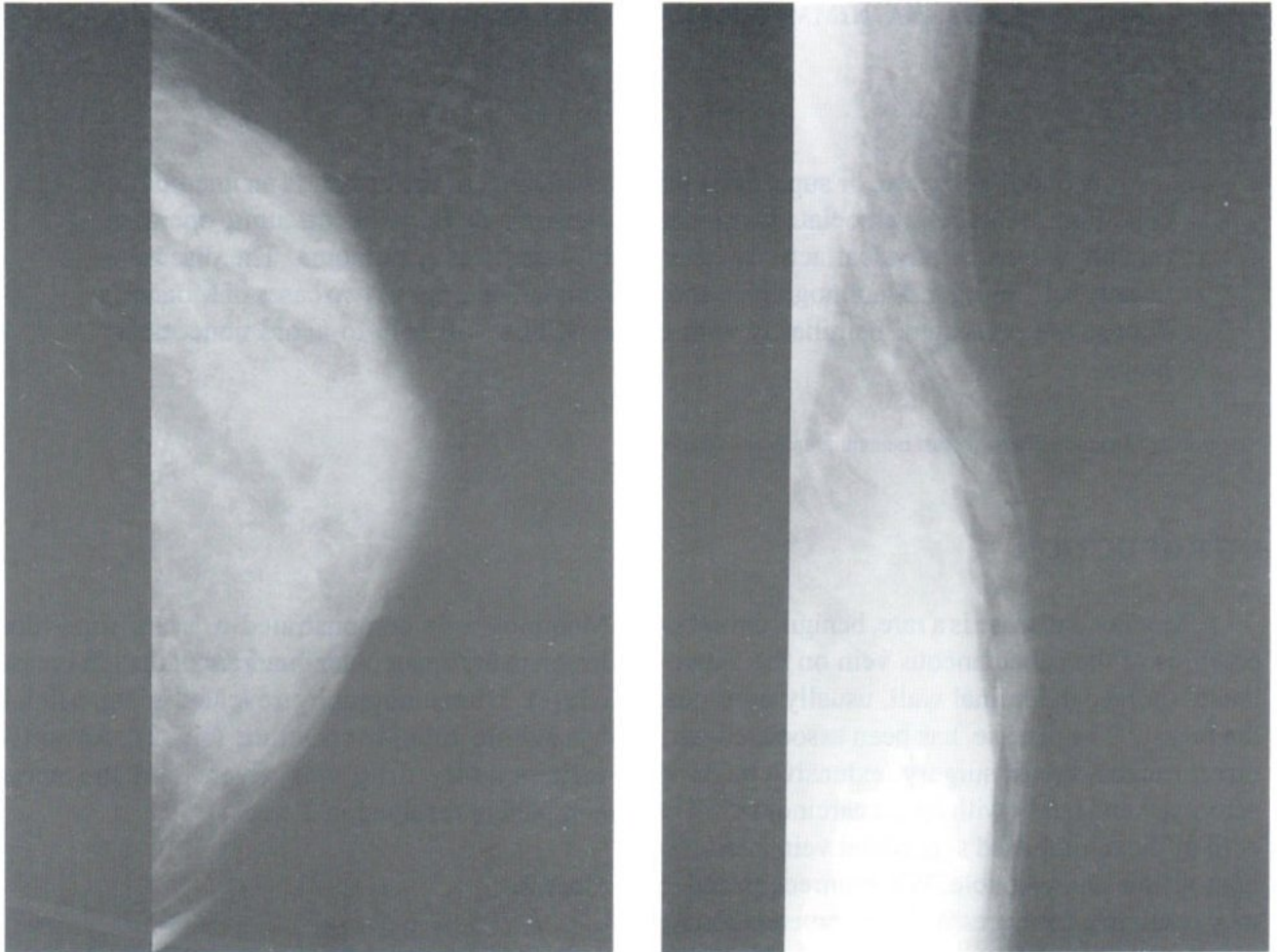


Fig 1. Craniocaudal(A) and tangential(B)mammograms show bead-like density in the upper outer quadrant of the breast.

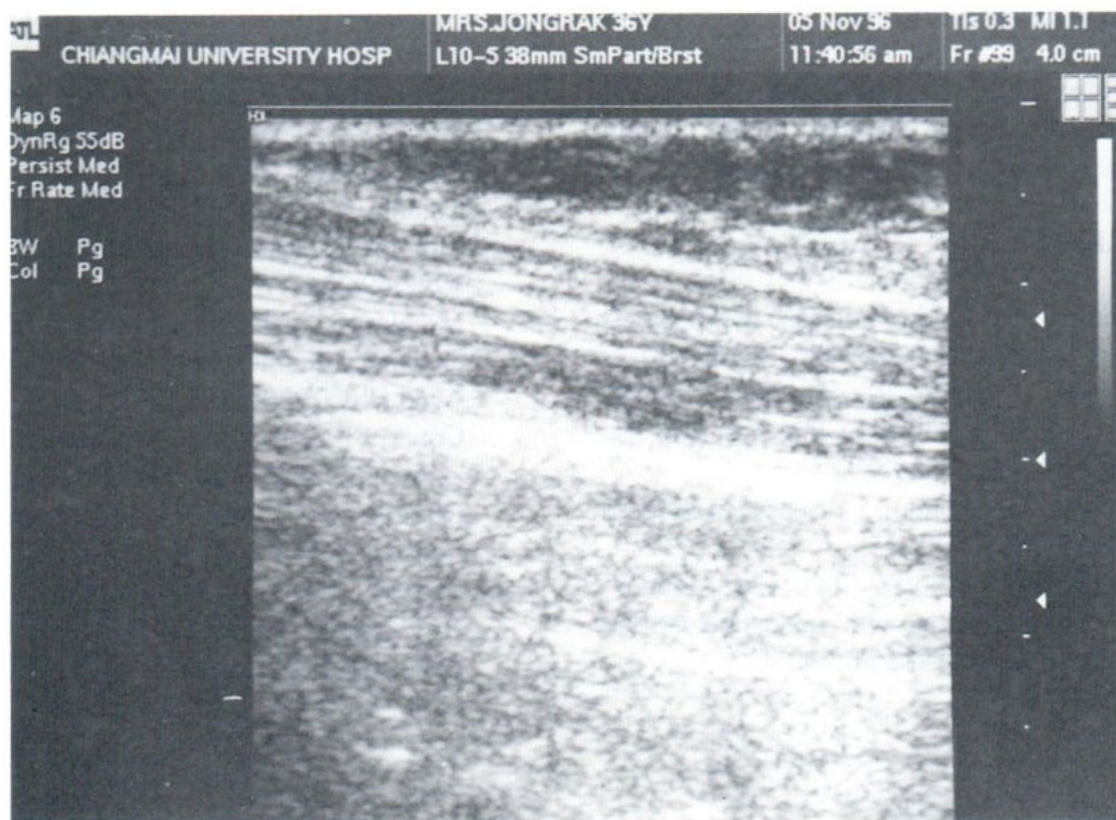


Fig. 2. Sonogram shows a hypoechoic tubular structure.

DISCUSSION

Mondor's disease was first described in 1939 by a French surgeon, Henri Mondor as subcutaneous angiitis of the breast.⁷ Since then, the disease has carried his name. Less than 300 cases of Mondor's disease have been reported in the world literature¹⁻⁷ and there are few descriptions of the mammographic and sonographic findings.^{1,6,8} It occurs three times more common in women than in men.^{6,9} The etiology of the disease is unknown but has been associated with benign causes including local trauma, operative trauma, extensive physical activity^{2,3} and rarely with breast carcinoma.⁴⁻⁶ The diagnosis is usually made clinically by the presence of a painful cord-like structure beneath the skin of the breast. Occasionally, the radiologist has the opportunity to do mammography for the palpable abnormality.

The tangential view is a good projection to demonstrate the thrombosed portion of the superficial vein and help to differentiate it from dense breast parenchyma or isolated ductal dilatation.^{1,8} The thrombosed vein is seen on mammogram as the thickened rope-like density located superficially in the breast. Sonography confirms a superficial, hypoechoic tubular structure. Our two cases had no history of trauma, surgery or breast carcinoma. The thrombosed vein spontaneously resolved within a few weeks. Mammographic and sonographic follow-up showed resolution of the abnormality. As breast imaging is more widely used for symptomatic women, familiarity with the clinical and radiologic findings of Mondor's disease will help to obviate biopsy.

ACKNOWLEDGEMENT:

We express our appreciation to Dr. Paul Longstreth (McKenzie Medical Center, Oregon, U.S.A.) for reviewing the manuscript.

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