

Late Hematoma Associated with Ruptured Breast Implant

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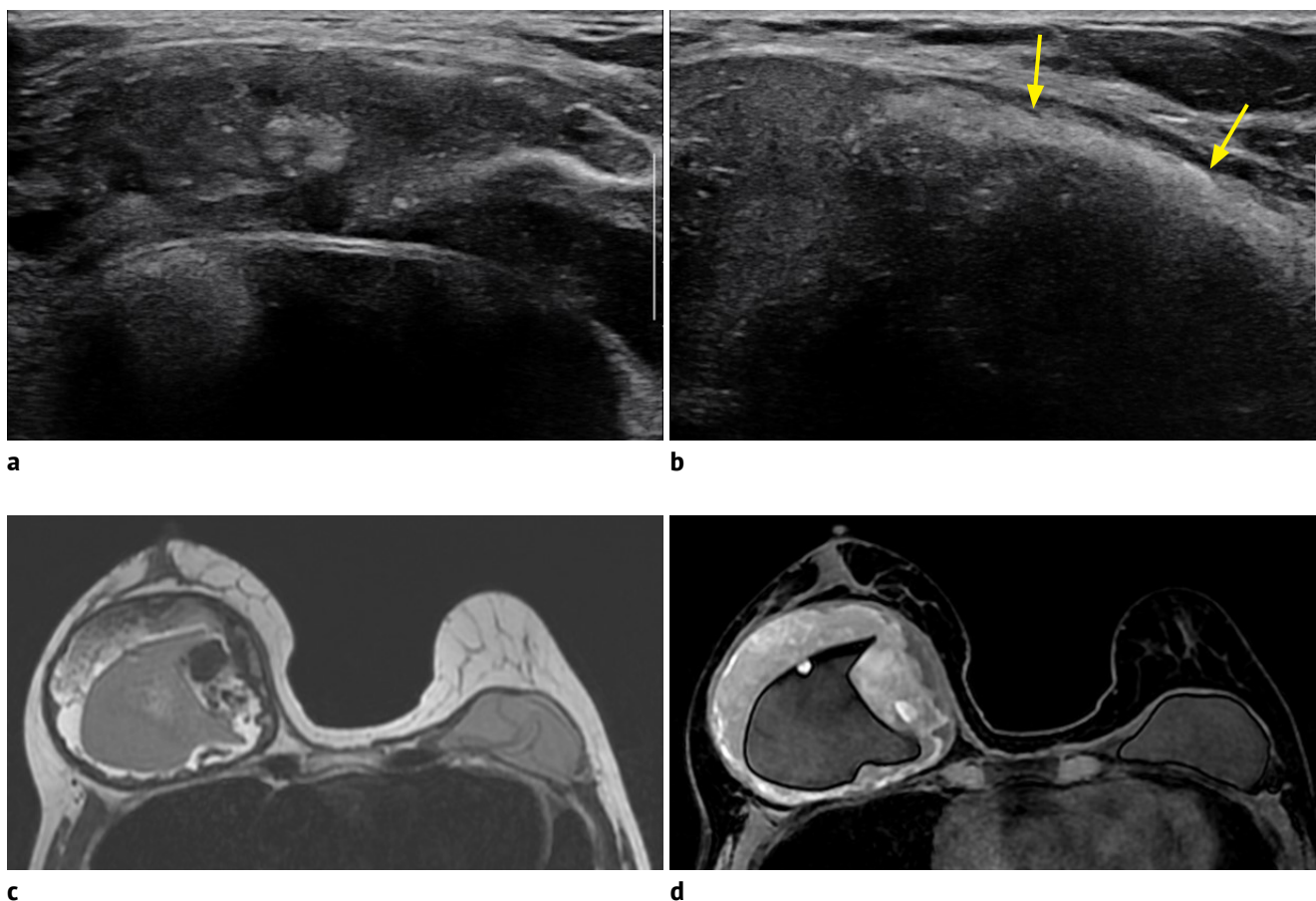


Fig. 1. A 70-year-old woman complaint painful breast swelling on her right breast.

a. Ultrasound shows large amount of fluid collection with heterogeneous echogenicity between fibrous capsule and elastomer shell of implant. **b.** A hyperechoic mass with posterior acoustic shadowing in the right 4 o'clock direction is positioned adjacent to fibrous capsule. **c, d.** T2-weighted axial and fat-suppressed T1-weighted axial images of MRI show large amount of hematoma with varying degree in right breast.

A 70-year-old woman complaint painful breast swelling on her right breast. She underwent augmentation mammoplasty 22 years ago. Her

breast ultrasound and MRI are presented as fig. 1. The ultrasound-guided core needle biopsy was performed on a hyperechoic mass adjacent

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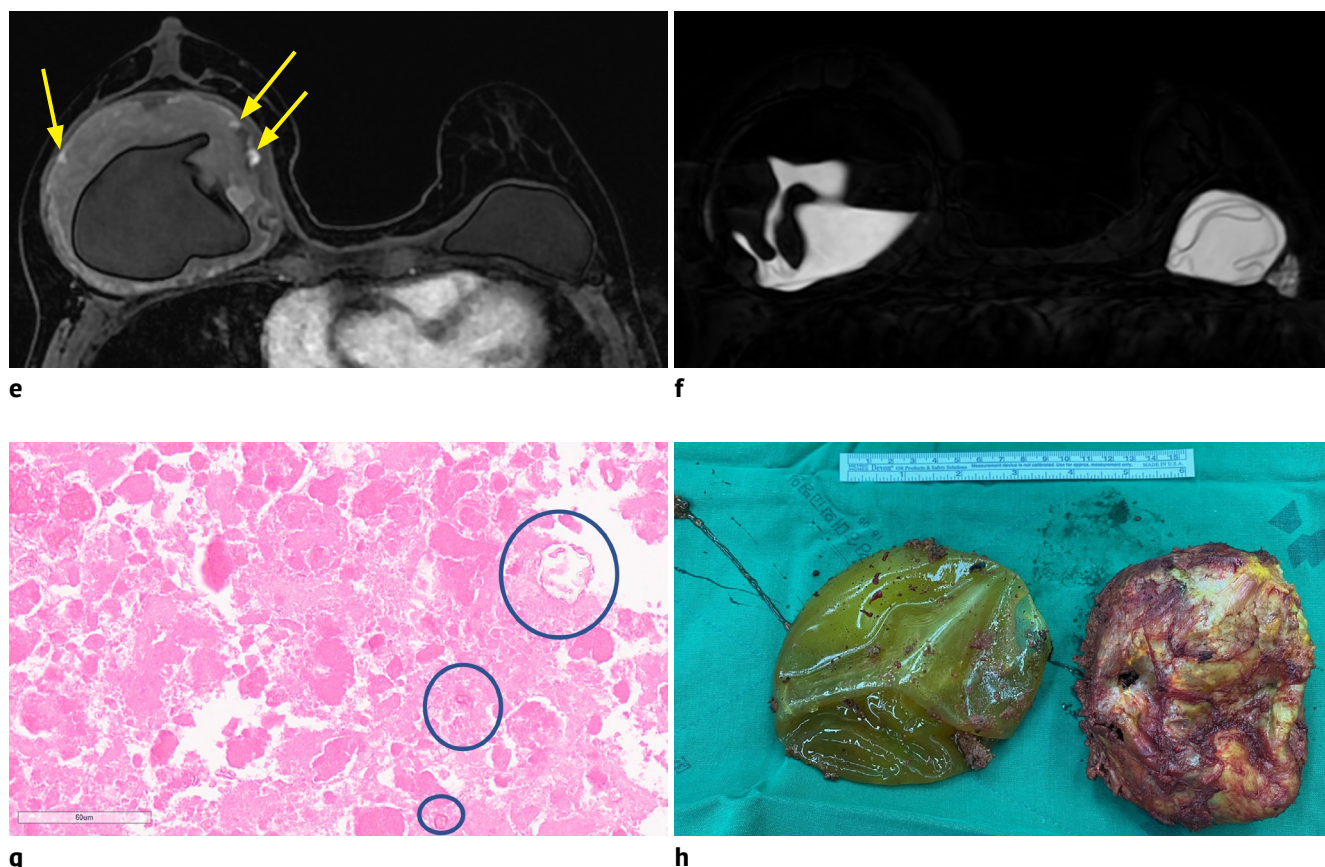


Fig. 1. **e.** Contrast-enhanced fat suppressed T1-weighted axial image shows peripheral rim and several nodular enhancements (arrows). **f.** Silicone-specific axial image shows linguine signs on the right breast implant. There are also extracapsular and intracapsular rupture signs on the left breast implant. **g.** Core needle biopsy specimen mostly shows acellular fibrinoid material, with focal areas of histiocytic reactions with foreign bodies (circles). (x400, hematoxylin and eosin) **h.** Excised capsule and ruptured implant from the right breast.

to fibrous capsule at the 4 o' clock direction and fluid aspiration was performed. The histopathologic diagnosis was fibrinoid material with focal granulomatous inflammation, which was induced by ruptured breast implant. Therefore, she underwent removal of implant and capsulectomy of the right breast.

Peri-implant fluid collection is normal and favorable if found immediately after augmentation mammoplasty. However, if it appears delayed after augmentation mammoplasty, it becomes a cause for concern. Late onset hematoma is a much rare complication associated with breast implant, and varies in onset from 4 months to 41 years after surgery (1). Although its etiological mechanism

has not been clearly established, it is assumed to be caused by erosion of capsular vessels due to trauma, inflammation, microfracture of the capsule, and friction of implant (2, 3). It usually manifests as breast swelling due to peri-prosthetic fluid effusion. MRI is the best modality for characterizing internal contents and determining the relationship to surrounding tissues (4). Imaging features of chronic hematoma varies depending on the age of hemorrhage and reflect histologic characteristics.

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