



A rare case of breast augmentation with polyacrylamide gel injection : present with abdominal mass

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Introduction

The polyacrylamide hydrogel (PAAG), also called amazing gel, was used as injectable material in augmentation mammoplasty since 1994[1]. There were about 200000 women underwent breast augmentation with PAAG injection in China during 1997 to 2006. Since then, more and more complications were reported as hematoma, mass, pain, infection, gel migration, asymmetry, or caused breast cancer[2, 3, 4, 5, 6]. PAAG had been banned for augmentation mammoplasty by the China Food and Drug Administration in 2006[9]. Herein, we reported a 45-year-old female had a complication of augmentation mammoplasty by PAAG injection in China and review the previous literature.

Case

A 45-year-old woman, who had received PAAG augmentation mammoplasty in China. 18 years past, she found a palpable non-tender mass over her left abdominal wall(Fig.1). There was no abdominal pain or other discomforts. All laboratory data were in normal range. MRI showed a hyper-signal tumor about 5 x 7 cm2 in left rectus abdominis muscle on T2WI and multiple lesions over bilateral breasts(Fig.2).

During operation, many rice-like foreign bodies over bilateral breast and left abdomen (under rectus muscle) found(Fig.3). We then performed capsulotomy and bilateral breast augmentation with silicone implant.

Four months after the surgery, the breast appearance were symmetric and natural without capsule contracture(Fig.4). The patient was very satisfied.

Discussion

Breast irregular mass and infection were the most common complications after PAAG injection. MRI is the first choice for differentiating it from breast neoplasm[7, 8]. Surgical removal of injected gel is the main method for complication management. However, we may encounter to breast deformity and asymmetry. Luo et al. reported the surgical gel excision via periareolar incisions and immediate reconstruction in 108 patients and were delayed in 28 cases by 6 months[1]. Jin et al. proposed the indications for immediate breast reconstruction, as follows: (1)no breast neoplasm (2) no infection. For other patients, two-stage reconstruction at 3-6 months may be preferred[9].

In this study, we present the case to highlight the gel migration and one-stage reconstruction with prosthesis implant and the outcome was excellent.

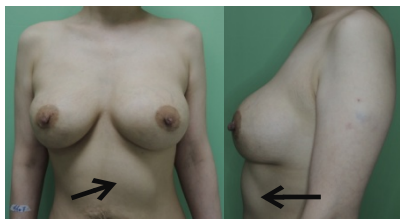


Fig. 1 Preoperative physical examination revealed a palpable abdominal mass (black arrow)



Fig. 3 Rice-like foreign bodies (black arrow)

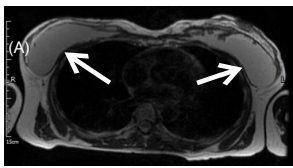


Fig. 2 MRI
(A) The lesions (white arrow) show hyper-signal on T2WI under bilateral pectoralis major muscle
(B) Another lesion (yellow arrow) under the left side rectus abdominis muscle



Fig. 4 Four months after reconstruction, the breast appearance were symmetric and natural without capsule contracture

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