#### **Peer Review File**

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# Reviewer A

#### **Comment:**

Please evaluate for typographic errors in the manuscript. The photographs are useful, but the case falls short in that you do not discuss how this patient was managed or what the outcome of the management was. That would make this case more clinically relevant.

# Reply:

Typographic errors are corrected. Discussion about patient management and clinical relevance of the case is provided.

# Change in the text:

Added: lines 89-96 in 2. Case Description

Added: lines 133-136 in 3.5 Implications and actions needed.

Added: lines 62-66 in 1.2 Rational and knowledge gap.

# **Reviewer B**

# **Comment 1:**

Of note, the authors have not shown the interventions or outcomes of the patient in the report. The explanation in the checklist that there is no intervention or follow-up is not enough. Please present the whole process that the patient undertook in the hospital. If no therapeutic intervention was administered, please also state it with reasons.

### Reply 1:

Patient presented to the breast imaging center following a referral from her primary care provider for evaluation of the expanding left breast lump. With the help of the mammogram and breast ultrasound diagnosis of giant ruptured oil cyst was made. Oil cyst, as a sequela of the fat necrosis, is a benign process and undergoes natural degeneration/evolution within the breast. Patient was explained and reassured of the benign nature of her condition. According to American Cancer Society, fat necrosis do not increase risk of breast cancer. Patient was clinically stable without signs of infection or bleeding and therefore did not require immediate active managed or hospital admission. Patient did suffer mild left breast asymmetry/deformation and was offered a referral to

a cosmetic surgeon for the evaluation and possible correction. Patient however elected not to seek any additional medical care.

# Changes in the text:

Added: lines 89-96 in 2. Case Description

## **Comment 2:**

The authors stated that "Patients with large oil cyst should also be informed about a possibility of a cyst rupture and suggested an option of preventative surgical excision" at the end (Line 103-105). So given that, we were wondering why no intervention was given to the patient.

# Reply 2:

We encountered the patient for the first time when she already presented with the ruptured oil cyst. The initial diagnosis of the posttraumatic oil cyst and following stages of its development was done at the different facility. For unknown reasons no treatment recommendations were given even when imaging demonstrated an imminent rupture of the cyst with outpouching. We will substitute words "preventative surgical excision" with "preventative treatment". We will also add to the text that a simple fine needle cyst aspiration is the most common and effective treatment of an oil cyst. Surgical excision is reserved for the recurrent cases or when cosmetically desirable. The important clinical relevance of the case is in demonstration of dramatic consequences of not treating the large oil cyst or at least informing the patient of its possible rupture. As a result, presentation of the expanding breast mass posed a diagnostic challenge for us initially since we were unaware of patient's prior history. Patient suffered significant anxiety and inconvenience. Simple preventative treatment is readily available. But then necrotic fatty tissue spills outside the cyst there is no effective management.

# **Changes in the text:**

Substituted: "preventative surgical excision" with "preventative treatment" line 133 in 3.5 Implications and actions needed;

Added: lines 132-136 in 3.5 Implications and actions needed.

Added: lines 62-66 in 1.2 Rational and knowledge gap.

Comment 3: A Flow chart is strongly recommended to demonstrate the progress of this giant oil cyst. Historical and current information from the causative event to the last visit can be organized as a timeline. And the authors could combine the timeline with radiographic images at every stage. Here is an example from our sister journal you can refer to: <a href="https://atm.amegroups.com/article/view/93096/html">https://atm.amegroups.com/article/view/93096/html</a>.

Reply 3: OK

## **Changes in the text:**

Timeline added: line 189-190

## **Comment 4:**

It is necessary and important to transparently discuss BOTH the STRENGTHS AND LIMITATIONS of the study in the Discussion. A separate paragraph is highly suggested.

Reply 4: OK

# **Changes in the text:**

Added section: lines 103-114, 3.2 Strengths and limitations.

### **Comment 5:**

As it is a giant cyst from the authors' description, it would be better to indicate the specific size of it in the case presentation.

**Reply 5:** Cyst measures approximately 7.0 x 6.0 x 6.4 cm.

# **Changes in the text:**

Added: line 79 in 1.3 Objective

#### Comment 6:

Signed consent always should be obtained from the patient (or their guardian) to write and publish a case report. The authors should understand we cannot accept the report without informed consent.

**Reply 6:** We obtained patient consent now and it is attached to the submission.

**Comment 7:** Our updated Author Instruction was recently developed. Would you please kindly reorganize the manuscript following the attached template or download at <a href="https://cdn.amegroups.cn/static/public/2.5-Structure%20of%20Case%20Reports-template-V2022.11.4.docx">https://cdn.amegroups.cn/static/public/2.5-Structure%20of%20Case%20Reports-template-V2022.11.4.docx</a>.

- (1) Introduction is structured in three parts: a) Background, b) Rationale and knowledge gap, c) Objective.
- (2) Equally, discussion is structured in five parts: a) Key Findings, b) Strengths and limitations, c) Comparison with similar researches, d) Explanations of findings, e) Implications and actions.
- (3) And please add a box that highlights the key findings and potential impacts.

**Reply 7:** We reorganized the manuscript as requested and added "Highlight Box", line 31. Please note, that in the process of reorganization the new line arrangement is created. We also added/deleted few transitional sentences.

#### **Comment 8:**

A more informative title would be welcomed. Maybe could highlight the time of medical history or the first report of ruptured giant breast oil cyst.

# Reply 8:

We changed the title as suggested: "First report of ruptured giant expanding breast oil cyst".

**Comment 9:** Please recheck full text and correct spelling mistakes or typos contained in the manuscript. E.g., "a resent trauma" (Line 94).

# Reply 9:

We corrected spelling mistakes.