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Isolated Breast Trauma Due to Gunshot Injury: Case Report

Ateşli Silah Yaralanmasına Bağlı İzole Meme Yaralanması

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Abstract

Gunshot wounds represent a major part of traumas, but isolated breast lesions due to gunshot wound are rare. A 51-year-old woman presented to the emergency department because of a close range gunshot wound. There were projectile entrance and exit lesions in the left breast. Debridement, hemostasis and drainage were performed. The patient was discharged without any complications. *(JAEM 2013; 12: 229-30)*

Key words: Gunshot injury, isolated, breast trauma

Özet

Ateşli silah yaralanmaları travmaların önemli bir kısmını oluşturur. Ateşli silah yaralanmasına bağlı izole meme yaralanması nadirdir. Elli bir yaşında kadın hasta yakın mesafeden ateşli silah yaralanması ile acile başvurdu. Sol memede kurşuna ait giriş ve çıkış delikleri mevcuttu. Debritman, hemostaz ve drenaj uygulandı. Hasta sorunsuz bir şekilde taburcu edildi. *(JAEM 2013; 12: 229-30)*

Anahtar kelimeler: Ateşli silah yaralanması, izole, meme travması

Introduction

Gunshot wounds have high rates of morbidity and mortality (1). Generally, breast traumas occur concurrently with chest wall, lungs and abdominal wounds (1, 2). Isolated breast injury is very uncommon (3). Herein, a patient with isolated breast trauma due to gunshot wound was presented.

Case Report

A 51-year-old woman presented to the department of emergency because of a close range gunshot trauma which had occurred approximately 2 hours earlier. In her medical history, she had 3 children and a history of smoking. Her family history did not reveal breast cancer history in her family. On physical examination, arterial pressure was 110/75 mmHg, heart rate was 86 bpm, respiratory rate was 20 breaths per minute. There was a projectile entrance wound in the inner quadrant of the left breast beginning at approximately 4 cm away from the areola at the 1 o'clock position; the exit lesion was located on the axillary tail after an approximately 15 cm horizontal projectile track with skin laceration and eruption Outer quadrants of the breast and axilla appeared ecchymotic (Figure 1). A fluctuating mass approximately 5x2 cm in size in the retroareolar region of the right breast at the 2 o'clock position, which was consistent with abscess, was palpated. Respiratory sounds were normal on auscultation of the lungs. PA lung graph and abdominal tomography were normal, thorax tomography showed that the trauma was limited to the left breast and abcess in the right breast (Figure 2). Laboratory tests were within reference ranges. Before the surgical treatment, patient consent was obtained. Under local anesthesia, the skin was incised to explore entry wounds and projectile material. Necrotic tissues and the structures including projectile fragments were excised without deforming breast esthetic. A hematoma approximately 6 cm in diameter extending to the axillary tail of the breast was drained. Since the surgical area was contaminated, two surgical drains were placed after hemostasis control, one into the breast surgical area and the other one towards the axillary tail, and then the skin was closed. The abscess in the right breast was drained through a subareolar incision. The culture of the abscess content yielded mixed infection. The patient was discharged on the postoperative 7 day without any problem. On the follow-up, no complication was identified.

Discussion

Gunshot wounds represent a major part of emergency department admissions because of trauma. Gunshot wounds account for a major part of trauma cases because of individual terrorism and regional causes (4). In gunshot traumas, the projectile causes dam-

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Figure 1. Outer quadrants of the left breast and axilla appeared ecchymotic

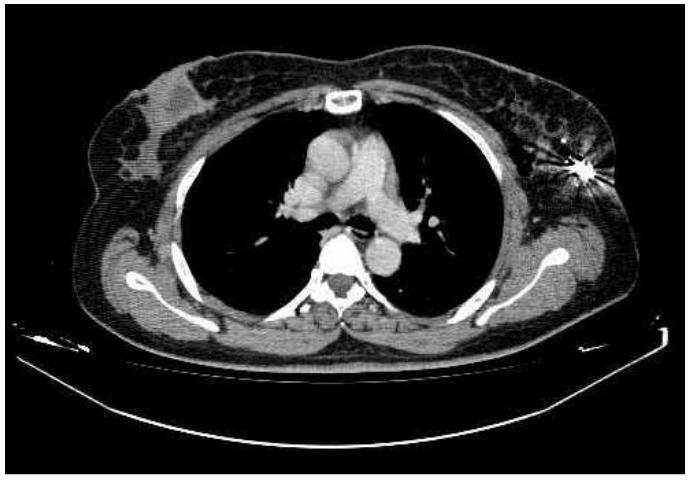

Figure 2. Thorax tomography showed that the trauma was limited to the left breast and abscess in the right breast

age with a blast effect not only in the organ in which the projectile enters but also in surrounding tissues outside the projectile track (1). Therefore, gunshot traumas are generally encountered as multiple organ traumas. Breast wounds occur together with intraabdominal organ damage at a rate of 50%, and less frequently with chest wall and lung wounds (2). Isolated breast wound is very uncommon. Pramod et al. reported a gunshot wound in the breast with silicone implant accompanying thoracic trauma (3). It was noteworthy that the gunshot wound was limited to the breast in the patient presented here.

A posteroanterior lung x-ray image obtained in an accurate position using adequate technique is the most valuable and rapid diagnostic tool for chest traumas. Computerized thorax tomography is superior to posteroanterior lung x-ray to recognize lung contusion, hemothorax, pneumothorax and mediastinal pathologies and it is used as the initial diagnostic tool for the patients with multiple systemic traumas. The lung x-ray of our patient was normal; tomography was normal except for the breast lesions. Morbidity and mortality due to gunshot traumas can be reduced with an accurate diagnosis and appropriate surgical approach (4). Debridement, hemostasis and drainage were performed for the wound in the left breast of our patient and the abscess in the right breast was drained during the same surgical session. The coexistence of central abscess in the right breast concurrently with the trauma may have resulted from the smoking addictive status of the patient (5). It was interesting that the patient did not attend any healthcare center prior to the trauma. The patient did not develop any postoperative complications.

Conclusion

It should be considered that isolated breast trauma, although uncommon, might occur due to gunshot trauma which generally causes to multiple organ injuries. The recognition of the abscess focus in the right breast indicates that the physical examination should always be done systemically.

Conflict of Interest
No conflict of interest was declared by the authors.

Peer-review: Externally peer-reviewed.

Informed Consent: Written informed consent was obtained from patients who participated in this case.

Author Contributions
Concept - S.G., M.K., A.O.; Design - M.K., Z.A., Supervision - Z.A.; Funding - F.T., Z.A.; Materials - U.B.; Data Collection and/or Processing - U.B., M.K.; Analysis and/or Interpretation - A.O.; Literature Review - A.O., M.K.; Writer - A.O., M.K.; / Critical Review - M.K., A.O.; Other - Z.A., A.O., M.K..

Çıkar Çatışması
Yazarlar herhangi bir çıkar çatışması bildirmemişlerdir.

Hakem değerlendirmesi: Dış bağımsız.

Hasta Onamı: Yazılı hasta onamı bu olguya katılan hastalardan alınmıştır.

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