

EDİTÖRE MEKTUP / LETTER TO THE EDITOR

Silicone implant induced lymphadenopathy after breast reconstructive surgery

Meme rekonstrüktif cerrahisi sonrası silikon implanta bağlı lenfadenopati

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To the Editor,

Breast cancer is the most frequently diagnosed cancer and the leading cause of cancer death in women. In general, patients with early-stage breast cancer undergo primary surgery (lumpectomy or mastectomy) to the breast and regional nodes with or without radiation therapy (RT). Among women with operable breast cancer, randomized trials have demonstrated equivalent disease-free and overall survival between mastectomy and breast-conserving therapy¹⁻⁴. Breast reconstruction is an option for patients following a unilateral or bilateral mastectomy. Modern breast reconstruction began in 1964 with the introduction of the silicone breast implant. Implants can help restore the breast to normal appearance. Common complications of breast reconstruction using implants and expanders include capsular contracture and implant failure. Silicone lymphadenopathy involving axillary lymph nodes is an uncommon complication after breast reconstruction surgery. We presented 3 patients with silicone lymphadenopathy in this paper.

Case-1: 42-years-old women presented with locally advanced breast carcinoma in april 2015. The pathologic diagnosis of patient was triple negative invasive ductal carcinoma and she received neoadjuvant chemotherapy (3 cycle FEC, 3 cycle docetaxel). After neoadjuvant treatment, right mastectomy, sentinel lymph node biopsy (SLNB) and expander implant performed. She received adjuvan radiotherapy. In October 2016, right axillary

(18 mm) and right intramammarian (8 mm) lymphadenopathy were developed and revealed with breast MRI. Histopathological examination of trucut biopsy from axillary LAP revealed benign findings. The patient's follow-upare still continuing.

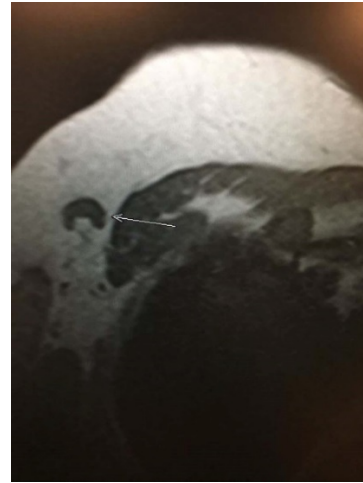


Figure-1. Breast magnetic resonance revealed right axillary (18 mm) and right intramammarian (8 mm) lymphadenopathy.

Case-2: 45-years-old women presented with node positive right breast cancer in july 2015 and right modified radical mastectomy (MRM), axillary lymph node dissection (ALND) and expander implant were performed. The diagnosis of patient was triple positive invasive ductal carcinoma and she received

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adjuvant chemotherapy (3 cycle FEC, 3 cycle docetaxel+trastuzumab and 1 year trastuzumab) and radiotherapy. In September 2016, while taking hormonotherapy, right axillary (22 mm, SUV max 4,8) lymphadenopathy was developed and revealed

with PET-CT imaging. Histopathological examination of excisional biopsy compatible with reactive changes. The patient's follow-upare still continuing

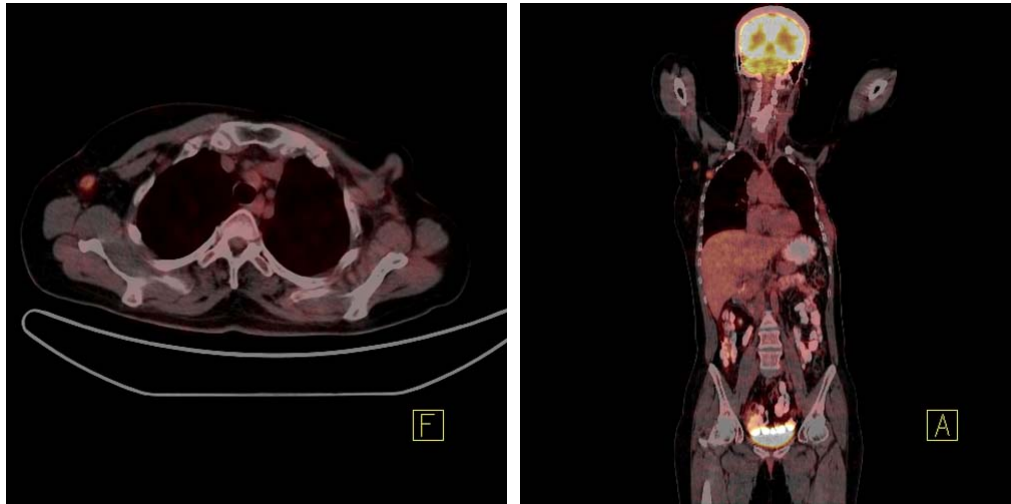


Figure 2a,2b. PET-CT imaging revealed right axillary (22 mm, SUV max 4,8) lymphadenopathy.

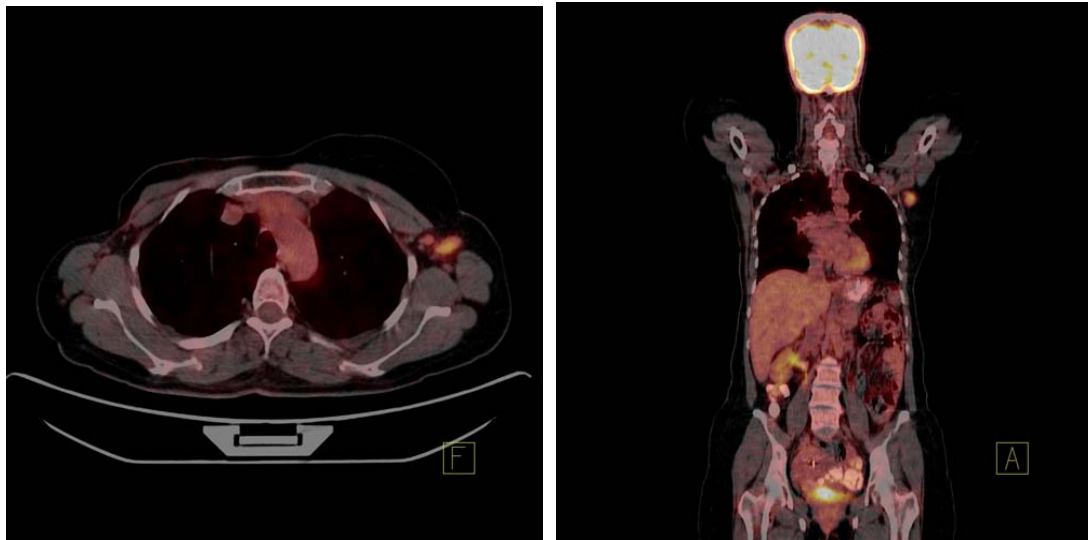


Figure-3a,3b. PET-CT imaging revealed left axillary (14 mm, SUV max 3,6) and left intramammary (16 mm, SUV Max 5,6) lymphadenopathy.

Case-3: 44-years-old women presented with node positive left breast cancer in June 2016 and left modified radical mastectomy (MRM), axillary lymph node dissection (ALND) and expander implant were

performed.The diagnosis of patient was hormone positive invasive ductal carcinoma and she received adjuvant chemotherapy (3 cycle FEC, 3 cycle docetaxel) and radiotherapy.In October 2017, while

taking hormone therapy, left axillary (14 mm, SUV max 3,6) and left intramammary (16 mm, SUV Max 5,6) lymphadenopathy was developed with PET-CT imaging. Histopathological examination of trucut biopsy from intramammary LAP revealed benign findings. The patient's follow-up are still continuing

In this article we presented three cases of silicone implant induced lymphadenopathy. The common characteristics of the 3 cases were the reactive lymphadenopathies after silicone implant approaches. Biopsies were performed from 3 patients and no malignancy was detected. Breast conserving surgery (BCT) and mastectomy reconstruction is appropriate for most women with early stage breast cancer. Oncoplastic surgery approaches are frequently used today for early stage breast cancer patients after local treatment.

Reconstructive breast surgery can be performed using tissue flap or implant-based techniques. During the last four decades, silicone has become one of the most extensively utilized materials for this purpose. There are numerous complications of silicone materials including local and systemic granulomatous inflammatory reactions affecting breast tissue, lymph nodes, joint capsules, heart, liver, and kidneys. In a retrospective review of over 18,000 procedures, the incidence of noninfectious complications was 10.3 percent after mastectomy plus implant, 17.4 percent after mastectomy plus flap and 11.7 percent for mastectomy plus implant and flap⁵. Silicone implant-induced lymphadenopathy is an uncommon side effect⁶⁻⁹. The diagnosis is made by physical examination and radiological examinations. The distinction of malign lymphadenopathy is very important for these patients.

In conclusion, silicone implant-induced lymphadenopathy is a rare complications of silicone-containing prostheses and it can be confused for malignancy in patients with breast implant.

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