### **IMAGING AND INVESTIGATIONS**

# Mirage Pneumonia

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23-year-old female engineering graduate came with complaints of fever, cold, postnasal discharge, cough and breathlessness of 1 week duration. She was an asthmatic on salbutamol inhalation whenever necessary.

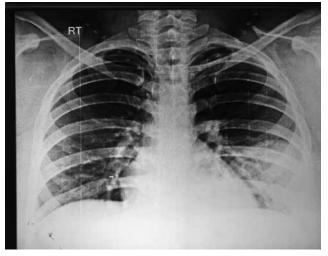
On examination, she had bilateral rhonchi but no crepitations. Leukocytosis and elevated erythrocyte sedimentation rate (ESR) were found on blood examination. Skiagram of paranasal sinuses showed bilateral maxillary sinusitis (Fig. 1) and skiagram of chest demonstrated left lower zone haziness (Fig. 2). It was suspected that she had left lower lobe pneumonia, hence planned for emergency admission and intravenous antibiotics. As there were no crepitations on auscultation, lateral view chest X-ray was taken to localize the pneumonia (Fig. 3). It was found that a lobular soft tissue in the breast that was casting shadow in the left lower zone. Now a closer look at the PA view revealed lobulated, nonsegmental shadow without any air bronchogram suggestive of an artefact. Then on further inquiry, it was learned that the patient underwent breast augmentation surgery for hypoplastic left breast. She improved with cefditoren and levofloxacin given for 10 days.

It is rare for doctors from developing countries to come across with a young patient with breast augmentation surgery. It may lead to over or misdiagnosis more so when surgery was unilateral. Implants also interfere with mammography and cardiac imaging leading to diagnostic difficulty.

Silicone breast implants were first introduced in breast reconstruction surgery in 1964. Since then, implants further evolved over time. Either they can be filled with silicone gel or saline. Breast implants can be



**Figure 1.** X-ray paranasal sinus demonstrating bilateral maxillary sinusitis.



**Figure 2.** Chest PA view sowing left lower zone opacity suggestive of pneumonia.

utilized for the reconstruction or cosmetic purposes. Implants may have single or double lumen. They are of diverse shapes and surfaces. There is concern about long-term deleterious effects of the implants. But there is no strong evidence of such ill effects except for surgical or implant related local effects. A systematic

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Figure 3. Lateral view of chest delineating soft tissue density in the breast and no parenchymal lesion.

review found no evidence of increased incidence of malignancy in other organs. <sup>1</sup> The American Association of Rheumatology opined that there is no increase in

connective tissue disorders in breast implant usage. However, rare association of low-grade anaplastic large cell lymphoma was reported by the US Food and Drug Administration (FDA).

Breastfeeding is not affected by implants and no evidence of an increment in the silicone excretion in breast milk.<sup>2</sup> They neither increase the risk of breast malignancy nor interfere with cancer detection by mammography.3 Ruptured breast implant may interfere with mammography. Magnetic resonance imaging (MRI) is the best modality in such clinical situations and is also superior in delineating the infections and their sequelae.

Breast implants may pose a problem due to abnormal shadows they create in chest X-ray taken for visa or immigration purposes.

## REFERENCES

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## Rule of 6 for Hypertension

Reducing dietary sodium intake to less than 6 g sodium chloride can alone reduce BP by 6 mmHg (2-8 mmHg).

### Rule of 9 for Hypertension

Eating 9 servings of fruits and vegetables (low fat dairy products with reduced saturated and total fats) can reduce BP by 9 mmHg.

### Rule of 10 for Hypertension

- In patients with stage 1 hypertension (upper BP 140-159 and lower BP 90-99 mmHg) and additional cardiovascular risk factors, achieving a sustained 10 mmHg reduction in upper BP over 10 years will prevent 1 death for every 10 patients treated.
- For every 10 kg weight reduction, a reduction of BP by 10 mmHg (5-20 mmHg) can be achieved.

## Formula of 20 for Hypertension

Appearance of high BP before the age of 20 means investigations.