

## CLINICAL VIGNETTE

---

# Aspergillus Cutaneous Infection Following Prosthetic Breast Implant

---

Matteo Dinolfo, M.D.

### **Case Report**

A 27-year-old female presented with ongoing post-operative left breast infection. Approximately 3-1/2 months prior to evaluation, she underwent bilateral breast implantation. Approximately 4 weeks postop, she developed erythema, induration of the left breast with purulent discharge. Initial cultures grew out coag-negative Staph. At that time, her surgeon treated her with Cephalexin 500 mg four times a day for 2 weeks with some minimal improvement. She was subsequently placed on suppressive therapy by her surgeon, however, drainage continued. I was asked to see the patient at that time, and recheck of her cultures including fungal cultures grew *Aspergillus Fumigatus*. The patient was started on Itraconazole 200 mg twice a day, at which time the surgeon was contacted and we arranged to remove the left breast prosthesis. At the time of removal, the left breast prosthesis was entirely encased in mold.

She was treated with a course of Itraconazole 200 mg twice a day for 4 weeks with resolution of her infection. Approximately 3 months after completion, she underwent re-insertion of a left breast implant and developed no sequelae. Her past medical history upon review was essentially unremarkable for any significant immunodeficiencies or other the underlying illnesses and her physical examination was also unremarkable, except for the drainage at the left breast surgical site and erythema of the breast.

### **Discussion**

*Aspergillus* species occur in organic matter and more than 100 species have been identified. Most common species are *Aspergillus fumigatus* and *Aspergillus niger*. *Aspergillus* may cause a broad-spectrum of diseases ranging from hypersensitivity reactions to direct angioinvasion. *Aspergillus* is primarily a pulmonary infection causing 4 main syndromes: allergic bronchopulmonary Aspergillosis; chronic

necrotizing Aspergillosis Pneumonia; pulmonary Aspergilloma; and invasive Aspergillosis. Patients who are immunocompromised may have hematogenously dissemination beyond the lung infections, potentially causing endophthalmitis, endocarditis, and abscesses in the myocardium, kidney, liver, spleen, soft tissues and bone. *Aspergillus* is second to *Candida* species as a cause of endocarditis. *Aspergillus* endocarditis and wound infection occur in the context of cardiac surgery. Cutaneous Aspergillosis is most commonly seen in hospital settings, and associated with the site of insertions of intravenous catheters or areas of adhesive dressings.

The clinical appearance of Cutaneous Aspergilloma is similar to that of *Pyoderma Granulosum*. Subsequent to this case, epidemiological studies of the outpatient surgical center where this surgery was performed revealed no evidence of further *Aspergillus* infections or prosthetic colonization. We also contacted the manufacturer of the prosthetic breast implant. They reported no other cases of similar infection. Perioperative and postoperative infections with Aspergillosis have been reported including Port-A-Caths, and Hickman catheters. Virtually all body sites have been invaded by *Aspergillus* and diagnostic and therapeutic approach should be tailored to the patient and the sites infected. A number of drugs are active against *Aspergillus* including, Voriconazole, Amphotericin B, Itraconazole, Caspofungin, and Posaconazole

## REFERENCES

1. Medical Letter - Treatment of Fungal Infections, December 1, 2009; (Issue 88) p.95 Medscape Reference. Drugs, Diseases, and Procedures. Eloise M Hartman, MD Chief Editor et al.
2. Mandell, Douglas and Bennett's Principles and Practices of Infectious Diseases David W. Denning, *Aspergillus* Species. Chapter 248, p2674.

Submitted on March 14, 2013