

## **Blastomycosis**

### **What is blastomycosis?**

Blastomycosis is a very rare fungal infection caused by breathing in microscopic particles (spores) of the fungus *Blastomyces dermatitidis* (*B. dermatitidis*).

Blastomycosis is not usually found in Australia. Originally it was thought to be found only in North America, but cases have been reported from many countries in the world. It occurs mostly in males who do outdoor activities and is more common in people with weakened immune systems.

### **What does blastomycosis look like?**

The spores of *B. dermatitidis* can lodge in the lungs and cause an acute as well as a chronic pneumonia. Infected people may initially have flu-like symptoms. Later fever and shortness of breath may develop.

In 20-40% of cases the infection spreads to other parts of the body – the skin, bones, kidneys, reproductive organs, urinary tract, liver, spleen and central nervous system.

Lesions can occur on the skin of the head and neck or elsewhere on the body. These may look elevated, crusted, warty, plaque-like or ulcer-like and can vary in size from a few millimetres to several centimetres. Early lesions can also appear as papules or pustules. Chronic lesions appear as warty plaques. These lesions can gradually increase in size if left untreated.

### **What causes blastomycosis?**

Blastomycosis is caused by breathing in microscopic particles (spores) of the fungus *B. dermatitidis* which is found in rotting wood, or moist soil with rotting wood and leaves.

### **How is blastomycosis diagnosed?**

The best way to diagnose the infection is to perform a fungal culture. It may also be diagnosed by examining a small sample of infected tissue under the microscope. An antigen test may detect the presence of the fungus in a urine or serum culture.

### **How is blastomycosis treated?**

Most cases of blastomycosis improve spontaneously. People with weakened immune systems suffering from blastomycosis may be treated with itraconazole, ketoconazole, fluconazole or amphotericin B. Treatment may be required for 6 months or more. Relapses may occur, particularly in those with weakened immune systems.