

## **Mastoidectomy**

### **WHAT IS MASTOIDECTOMY?**

This is an operation to open and evacuate the mastoid process, the bony prominence behind the ear. A curved incision is made and the overlying bone is drilled clear to reveal the mastoid antrum (cavity) beneath. Any diseased tissue or debris is removed. The operation, which is performed under general anesthesia, requires several days stay in the hospital.

### **WHY IS IT PERFORMED?**

Infection of the middle ear cavity may spread to the mastoid air cells situated in the bone behind the external ear. This condition, known as mastoiditis, is characterized by fever, pain in the mastoid area (invariably worse at night), and hearing loss. In most cases, this potentially serious condition responds to antibiotic treatment. If it persists, however, surgery is needed to prevent abscess formation (sometimes extending to the brain) and, possibly, permanent deafness in the affected ear.

### **RISKS AND BENEFITS**

The risks of surgery are low compared to those of untreated mastoiditis, with an implied threat not only to hearing but also to the brain. Besides the usual risks of general anesthesia, the principal hazard of mastoidectomy is damage to the facial nerve. Occasionally, deafness persists.

### **THE PROCEDURE**

#### **1. PREPARING FOR MASTOIDECTOMY**

You may be asked to come into the hospital a day or two ahead of surgery for investigations which include: A full physical examination; blood tests; ear swabs for laboratory culture (if any discharge is present); x-rays of the mastoid area; and audiometric (hearing) tests. You should be warned that full return of hearing is unlikely for a least 2-3 weeks after surgery.

#### **2. ON THE DAY OF SURGERY**

You will receive nothing by mouth for at least six hours before the operation is due to begin. You will be asked to take a shower or bath and to remove any makeup, jewelry, or dentures. The nurse will shave the skin around the affected ear, tying the remaining hair back clear of the site. You will be given your premedication to relax you an hour or so before surgery.

#### **3. IN THE OPERATING ROOM**

The surgeon works using an operating microscope, with you lying, anesthetized, on your back, with your head resting on a supportive ring. Once the incision has been made and the mastoid bone is exposed, special instruments are used to drill or chip away at the bone to reveal the mastoid antrum (cavity) within. Any infected air cells are removed, together with any debris,

leaving a healthy bone cavity. Finally, a drain is inserted and the wound is closed with sutures. A sterile dressing is applied to the wound site, secured by a headband. You will be taken to the recovery room briefly for monitoring as you come out of the anesthetic.

#### **4. BACK IN YOUR ROOM**

Your vital signs (temperature, pulse, blood pressure, respiration) will be checked frequently in the first few postoperative hours. You will feel sleepy and sore and possibly nauseous. You will be given painkillers as necessary and drugs to counteract any nausea. You will be encouraged to rest on your side, with the affected ear uppermost. Sudden movements of the head should be avoided as these may make you feel dizzy. You should be able to get out of bed on the first postoperative day, although it is probably best not to bend over for the first few days following ear surgery. The wound drain will be removed within 2-3 days and the stitches within about five days. You should use an ear plug or shower cap to prevent water getting into the ear when you take a shower or bath. Also, try not to sneeze or blow your nose for at least a week or two after surgery. With good progress you can look forward to going home within a week.

#### **GOING HOME**

Before leaving the hospital you will be given an appointment for a postoperative checkup with your surgeon. You should take things easy for at least a week to ten days, avoiding crowded places where there is risk of infection. You should be able to resume most normal activities, including driving a car and returning to work, within 2-3 weeks. However, your surgeon may advise you to avoid swimming or any activity causing pressure changes in the middle ear (such as flying) until healing is complete.

#### **POSSIBLE COMPLICATIONS**

Complications are rare following mastoidectomy, but do include hemorrhage and infection.