What happens after the surgery?
Transsphenoidal hypophysectomy is performed as an inpatient procedure. After the procedure, you will be taken to the recovery room and monitored as you awake from anesthesia. You will then be transferred to the intensive care unit for close observation. Within 48 hours, you will most likely be discharged.

Post-operatively, the cotton sponges should remain in your nose until removed by your surgeon.

You are likely to experience incisional pain following the procedure. This pain can be managed with oral analgesics or narcotics. Incisional pain accompanied by swelling, redness, discharge, numbness, or flu-like symptoms (e.g., fever/chills) should be reported to your doctor immediately.

What is involved in the the recovery time?
Normal wound care during the post-operative period requires keeping the incision clean and dry. You will usually be able to shower, but baths are not advisable since soaking the wound should be avoided until after your first follow-up appointment with your doctor (usually about 2 weeks after your operation). Healthy foods, especially those high in protein, should be eaten unless your doctor tells you otherwise.

You must not blow your nose after this type of operation. Doing so could disrupt the healing process and lead to cerebrospinal fluid leak or other problems. A small amount of bloody or mucous-type drainage from the nose is expected.

You may have headache or some pain after the operation. You may be given a prescription for pain medication. Take all medications prescribed for you and do not stop taking them abruptly.

What is a Transsphenoidal Hypophysectomy?
Transsphenoidal hypophysectomy is a minimally invasive procedure that is used to treat pituitary tumors. This approach requires entry through the sphenoid sinus, one of the bony air spaces behind the nose. During the procedure, doctors use a high-powered operating microscope or a fiberoptic endoscope to visualize the pituitary tumor. This provides the surgeon a relatively safe and unobstructed pathway to remove the tumor while avoiding important brain structures.
What are the indications? When is it used?
Transsphenoidal hypophysectomy is commonly used to treat tumors of the pituitary gland. This surgery is especially indicated for tumors that respond poorly to medication or that require urgent decompression because of pressure on important brain structures like the optic nerve. Other tumors that arise in the region of the cranial base and the pituitary gland can also be removed using this technique (Figure 2).

How will I prepare for the surgery?
The decision to proceed with the operation is made in cooperation with your surgeon. Before any operation, you should understand as much about the procedure as possible. Always talk to your doctor if you have any questions or concerns.

Once you and your doctor have agreed that surgery is the most appropriate course of action, you will most likely be required to undergo a complete physical examination. This will evaluate whether your body is able to physically tolerate the upcoming operation.

Always let your doctor know if you are currently taking any medications. Anti-platelet agents (e.g. aspirin or Plavix®) and blood thinners (e.g. Coumadin® or heparin) should not be taken before the operation as they have been shown to increase bleeding during surgery.

You should stop smoking at least 2 weeks prior to any operation since it can interfere with the healing process.

On the day of your surgery, you will most likely be admitted to the hospital early in the morning. You should not eat or drink anything after midnight on the morning before surgery.

What happens during the surgery?
This procedure is performed under a general anesthetic. The surgery is done through the nose (Figure 1), or through the mouth by making an incision at the junction of the upper inner lip and gum. This allows the surgeon to reach the pituitary tumor and resect it. At the end of the operation, the surgeon may insert a graft (made from fat or fascia tissue) to stop or prevent cerebrospinal fluid leakage. Fascial grafts are harvested by making a small incision on the outer side of the right thigh (Figure 3A), while fat grafts are taken from the lower abdomen (Figure 3B).

Finally, cotton sponges are inserted into your nose to stop bleeding and to prevent cerebrospinal fluid leakage, but you still have the ability to breathe through your mouth.

What are the possible complications?
As with all major surgical procedures, complications can arise. Some of the most common complications following transsphenoidal hypophysectomy include:

- **Infection** - Post-operative infection is rare, but may become serious if left untreated.
- **Bleeding**
- **Complications from anesthesia** (the anesthesiologist will discuss this with you)
- **Continued pain**
- **Hypopituitarism** - The pituitary gland may become inactive and hormone replacement therapy may be recommended by your doctor.
- **Cerebrospinal fluid (CSF) leakage** from the nose.
- **Numbness**
- **Nerve damage** - Any surgery done near the spinal canal can potentially cause injury to the spinal cord or nervous system.
- **Pneumonia**
- **Thrombophlebitis** (a condition in which blood clots form in the large veins)
- **Death**

This is not intended to be a complete list of all possible complications.