

Procedures/Risks: biopsy/aspiration (muscle, tissue)

Breast tissue aspiration

Procedure: Small samples of breast fat will be obtained by fine needle aspiration (suction). This technique uses a small needle to draw out a sample of fat about the size of a pea or less, from the breast. The sample and results from this procedure will be used for research purposes only.

Risks: Fine needle aspiration of the breast usually does not result in dangerous side-effects. The procedure uses a small needle, like that used for drawing blood from a vein, and a syringe to suction (pull) out a small amount of fat tissue (about the size of a pea) from the breast. Local anesthesia will be used to numb the area of the breast for the aspiration. There might be some temporary pain or discomfort associated with this research procedure. Fine needle aspiration has the possible risk of bleeding, bruising, and rarely infection or swelling. Only properly trained medical personnel will perform this procedure.

Skeletal Muscle and Fat Tissue Biopsy

Procedure: A biopsy is the removal of a piece of tissue from the body. After the procedure is explained to you by the physician, you will have your [thigh] area [and abdominal] area cleaned with betadine (a cleaning solution) under sterile conditions. These areas will then be numbed with a local anesthetic or numbing agent called Lidocaine. If you are allergic to Lidocaine, then different numbing medication will be used. A small incision will be made in your [abdominal, arm and/or thigh] area. A needle will be used to obtain tissue from these areas.

Risk: Muscle [and fat] biopsies may be painful. The sites of the biopsy may get infected or bleed. There is a remote possibility that a keloid (scar tissue) will form at this site. However, having trained personnel conduct the procedure should reduce the possibility for these things to occur.

There may be some discomfort from the biopsy procedure. You may ask the doctor to give you some medicine to numb the area from where the biopsy will be taken.

Biopsy(muscle)

Procedure: The biopsy requires a cut in the skin about 1 ½ inches long. Before a cut is made in the skin, the skin will be numbed with medicine through an injection. Lidocaine is a local anesthesia that dentists frequently use for dental procedures. At each biopsy, 3 small pieces of muscle (the size of an eraser on a pencil) will be removed. The biopsies will be performed at The Ohio State University. After the cut is made and the biopsy taken, the incision is closed with stitches that will need to be removed in 10-14 days.

Risk: Potential complications from the muscle biopsy procedure include: infection at the biopsy site which may require early stitch removal or possible antibiotic treatment.; bleeding at the site of the biopsy that could require additional stitches; and/or pain at the site of the biopsy.

Acetaminophen (also known as Tylenol®) will be offered every 4 hours as needed to control

pain. There will be a scar at the site of the incision; usually this is small but occasionally some individuals have a tendency to develop bigger scars.