CADAVER DISSECTION – FACE

All of the terms indicated below in **BOLD** print should be identified during the student’s oral presentation on this region.

**PROCEDURE:**
I. **SURFACE ANATOMICAL LANDMARKS** – Prior to dissection, identify the following surface anatomical landmarks of the face: **glabella, external nose (root, apex, septum, ala, nostril), and philtrum.**

II. **SUPERFICIAL VESSELS & NERVES** – Determine the location of any major superficial veins or superficial nerves in your area of dissection to avoid damaging these structures as you dissect.

III. **REMOVAL OF SKIN** – Using the following steps, remove the skin from the median line of the face laterally.

   A. **Incision Lines** - Use a marking pencil to outline the incision lines (illustrated on the handout). Use a scalpel blade to cut through the skin. Insert a smooth probe under the skin along the remaining incision lines (instructor will demonstrate). When making your remaining incision, only cut to the smooth probe to avoid damaging superficial structures deep to the skin.

   Median Incision Lines – Cut the skin along the median line from the middle of the forehead to the chin. Cut around the eye, nose, and mouth as indicated on the handout.

   Lateral Incision Lines – Cut along the inferior margin of the mandible. * Normally the brain in each cadaver has been removed during the preservation process for the cadaver. There should be an incision line laterally from the sagittal plane to the auricle of the ear.

   B. **Removal of skin** – When removing the skin laterally, avoid damaging the superficial muscle (many are attached to the skin), superficial nerves, and superficial vessels. ONLY THE SKIN SHOULD BE REMOVED. LEAVE ANY SUBCUTANEOUS TISSUE AND FASCIA.

IV. **MUSCLE IDENTIFICATION AND SEPARATION**

   **SUPERFICIAL**

   A. **Epicranius (frontal belly or frontalis)** – Identify this muscle in the forehead region and the **epicranial aponeurosis** (galea aponeurosis), which connects the frontalis muscle with occipital belly of the Epicranius muscle.

   B. **Orbicularis oculi** – Identify this muscle and its two subdivisions (outer **orbital part** and inner **palpebral part**) around the eye.

   C. **Orbicularis oris** – Identify the portion of this muscle visible around the opening of the oral cavity.

   D. Identify the following muscle inserting into the orbicularis oris.

   **Superior to the mouth** (lateral to medial) – **zygomaticus major, zygomaticus minor, levator labii superioris,** and the **levator anguli oris** which is deep to these muscles.
Lateral to the mouth – risorius
Inferior to the mouth (lateral to medial) – depressor anguli oris, depressor labii inferioris, and mentalis.
E. Masseter – Identify the masseter muscle. AVOID DAMAGING THE PAROTID DUCT, WHICH CROSSES THIS MUSCLE FROM POSTERIOR TO ANTERIOR PASSING MEDially INTO THE DEEPER BUCCINATOR MUSCLE. ALSO OBSERVE THE BRANCHES OF THE FACIAL NERVE SUPERFICIAL TO THE MASSETER MUSCLE.
F. Platysma – Identify the platysma muscle as it inserts on the mandible and orbicularis oris muscle.
G. Identify and remove the buccal fat pad anterior to the masseter muscle and identify the buccinator muscle and facial artery and vein.

V. VESSEL IDENTIFICATION
A. Superficial temporal artery – Identify the superficial temporal artery as it emerges superiorly from the parotid gland. Follow it in a superior direction.
B. Facial artery and facial vein – Identify these vessels as they cross the mandible and angle across the face toward the base of the nose. * Facial nerve is more posterior, superficial, and less tortuous than the facial artery.

VI. NERVE IDENTIFICATION
A. Facial nerve – Identify braches of the facial nerve as they emerge from the parotid gland.
B. Trigeminal nerve
1. Ophthalmic Division – Supraorbital nerve (emerges from the supraorbital foramen deep to the orbicularis oculi muscle).
2. Maxillary Division – Infraorbital nerve (emerges from the infraorbital foramen deep to the orbicularis oculi muscle and superior muscle inserting into the orbicularis oris muscle.
3. Mandibular Division – Mental nerve (emerges from the mental foramen deep to the depressor labii inferioris and mentalis muscles.

VII. ORGAN IDENTIFICATION – Parotid (salivary) gland and parotid duct – Identify the parotid gland just anterior to the auricle of the ear and its duct, which crosses the masseter muscle.