There are a couple of things you do not want to touch when you are removing an eye during an enucleation or exenteration. Enucleations are usually considered surgeries where you are guided by bone – how wrong can you go. Even if you cut the muscles of mastication, it is usually not a big deal. In the floor of the orbit, running in the ventromedial aspect against the bone, are arteries, veins and nerves – maxillary artery, vein and nerve. Generally if you can identify any named vessel or nerve, you should not cut it – especially if it is an artery. These structures are important and supply critical tissues in the maxilla (teeth, etc.), so you do not want to cut them. **Do not place curved scissors underneath the eye with the curve pointing down.** When you are working in the orbit underneath the eye with curved scissors, the tips should always point up.