Dissection and identification of fetal pig muscles essay sample



Time Allotment: Muscle dissection; 4 hours. Multimedia Resources: See Appendix D for a list of multimedia offerings. The Anatomy of the Fetal Pig (CBS, 62 minutes, VHS, DVD) Fetal Pig (DryLab Plus) (ED, CD-ROM) The Fetal Pig: A Technological Dissection (ED, CD-ROM) Solution: Carboglycerine solution 30 grams fungicide (Benomyl, Sigma) 250 milliliters glycerine 1 liter water Mix together and store in a closed container.

Dissection Review

Many human muscles are modified from those of the pig (or any quadruped) as a result of the requirements of an upright posture. The following questions refer to these differences. 1. How does the human trapezius muscle differ from the pig's? Humans have one single trapezius muscle, the pig has three separate muscles.

They are the clavotrapezius, the acromiotrapezius, and the spinotrapezius.

2. How does the deltoid differ?

In the human it is thick and fleshy but the pigs is a thin band.

3. How does the extent and orientation of the human sartorious muscle differ

from its relative position in the pig? The human satorius is thin strap like muscle that runs obliquely across the anterior thigh. The pigs flat, and covers most of the anterolateral thigh.

4. Explain the differences in terms of differences in function. The pig sartorius acts to adduct the thigh and flex the hip. The human sartorius produces flexion at the knee and lateral rotation of the hip. 5. The human rectus abdominis is definitely divided by four transverse tendons (tendinous intersections). These tendons are absent or difficult to identify in the pig. How do these tendons affect the human upright posture? These tendons support the abdominal muscular wall so that the viscera are not allowed to become pendulous in the upright posture of humans.