

Cat Dissection Lab

Title: The Muscular System of the Cat

Materials: shirt, gloves, paper towels, blade, forceps, probe, cat, bag, colored pencils, rubber band, tape, pins, paper

Muscles of the Thigh (Dorsal) (2)

Procedure:

1. Identify and locate the **Tensor fascia latae, Biceps femoris**
2. remove CT with forceps
3. dissect muscles
4. probe/tease muscles to identify the line of demarcation

Draw:

5. draw and label **all** CAT muscles of the dorsal thigh.

Muscles of the Thigh (Ventral) (9)

Procedure:

1. Identify and locate the **Sartorius, Gracillis, Rectus femoris, Semimembranosus, Semitendinosus, Vastus medialis, Vastus lateralis, Adductor femoris, Adductor longus**
2. remove CT with forceps
3. dissect muscles
4. probe/tease muscles
5. transect and reflect Sartorius and Gracillis to expose the deep muscles
6. remove CT from Rectus femoris, Semimembranosus, Semitendinosus, and Vastus medialis
7. dissect muscles
8. probe/tease muscles

Draw:

9. draw and label **all** CAT muscles of the ventral thigh

Muscles of the Lower Leg (6)

Procedure:

1. Identify and locate the **Peroneus longus, Extensor digitorum longus, Gastrocnemius, Soleus, Tibialis anterior, and the Achilles tendon**
2. remove CT with forceps
3. dissect muscles
4. probe/tease muscles to identify the lines of demarcation

Draw:

5. draw and label **all** CAT muscles and (1) tendon of the lower leg.

Conclusion Questions for Thigh and Lower Leg:

- 1a. If a muscle and/or tendon crosses over the **medial** side of the ball-and-socket joint of the pelvis, what movement (action of the muscle) will be performed?
- 1b. Name one muscle from your list above that performs this movement.
- 1c. Draw the **comparable** human muscle, its origin and insertion on the handout provided.
- 2a. If a muscle and/or tendon crosses over the **anterior** side of the hinge joint of the knee, what movement (action of the muscle) will be performed?
- 2b. Name one muscle from your list above that performs this movement.
- 2c. Draw the **comparable** human muscle, its origin and insertion on the handout provided.

Muscles of the Back (4)

Procedure:

1. Identify and locate the **Latissimus dorsi, Spinotrapezius, Acromiotrapezius, Clavotrapezius**
2. remove CT with forceps
3. dissect muscles
4. probe/tease muscles to identify the lines of demarcation

Draw:

5. draw and label **all** CAT muscles of the back

Muscles of the Shoulder (3)

Procedure:

1. Identify and locate the **Clavodeltoid (Clavobrachialis), Acromiodeltoid, and Spinodeltoid**
2. remove CT with forceps
3. dissect muscles
4. probe/tease muscles to identify the lines of demarcation

Draw:

5. draw and label **all** CAT muscles of the shoulder

Conclusion Questions for Back and Shoulders:

- 3a. If a muscle and/or tendon crosses over the **lateral** side of the ball-and-socket joint of the shoulder, what movement (action of the muscle) will be performed?
- 3b. Name one muscle from your list above that performs this movement.
- 3c. Draw the **comparable** human muscle, its origin and insertion on the handout provided.
- 4a. If a muscle and/or tendon crosses over the **inferior** side of the ball-and-socket joint of the shoulder, what movement (action of the muscle) will be performed?
- 4b. Name one muscle from your list above that performs this movement.
- 4c. Draw the **comparable** human muscle, its origin and insertion on the handout provided.

Muscles of the Arm- Medial View (Ventral) (1)

Procedure:

1. Identify and locate the **Biceps brachii**
2. remove CT with forceps
3. reflect Pectoralis major to expose Biceps brachii
4. dissect Biceps brachii
5. probe/tease muscle

Draw:

6. draw and label **all** CAT muscles of the ventral arm

Muscles of the Arm- Lateral View (Dorsal) (2)

Procedure:

1. Identify and locate the **Triceps brachii longus, Triceps brachii lateralis**
2. remove CT with forceps
3. dissect both Triceps muscles
4. probe/tease both muscles

Draw:

5. draw and label **all** CAT muscles of the dorsal arm.

Muscles of the Forearm- Medial View (Ventral) (4)

Procedure:

1. Identify and locate the **Flexor carpi radialis, Flexor carpi ulnaris (both heads), Palmaris longus, Pronator teres**
2. remove CT with forceps
3. dissect each muscle
4. probe/tease each muscle

Draw:

5. draw and label **all** CAT muscles of the medial forearm.

Muscles of the Forearm (Lateral) (5)

Procedure:

1. Identify and locate the **Brachioradialis, Extensor carpi radialis (both heads), Extensor carpi ulnaris, Extensor digitorum communis, and Extensor digitorum lateralis**
2. remove CT with forceps
3. dissect each muscle
4. probe/tease each muscle

Draw:

5. draw and label **all** CAT muscles of the lateral forearm.

Conclusion Questions for Arm and Forearm:

- 5a. If a muscle and/or tendon crosses over the **posterior** side of the hinge joint of the carpals, what movement (action of the muscle) will be performed?
- 5b. Name one muscle from your list above that performs this movement.
- 5c. Draw the **comparable** human muscle, its origin and insertion on the handout provided.
- 6a. If a muscle and/or tendon crosses over the **anterior** side of the hinge joint of the elbow, what movement (action of the muscle) will be performed?
- 6b. Name one muscle from your list above that performs this movement.
- 6c. Draw the **comparable** human muscle, its origin and insertion on the handout provided.

Muscles of the Chest (5)

Procedure:

1. Identify and locate the **Pectoantibrachialis, Pectoralis major, Pectoralis minor, Xiphohumeralis and Serratus ventralis**
2. use forceps to remove connective tissue attached to the Pec muscles
3. dissect and isolate the Pec muscles
4. identify each muscle
5. reflect Pectoralis minor to expose Serratus ventralis
6. tease connective tissue that covers Serratus ventralis to show the individual bands of the muscle
7. identify Serratus ventralis

Draw:

8. draw and label **all** CAT muscles of the chest

Muscles of the Abdomen (4)

Procedure:

1. Identify and locate the **External oblique, Internal oblique, Rectus abdominis, and Transversus abdominis**
2. remove the CT from the muscles
3. dissect and isolate the External oblique and Rectus abdominis
4. identify each muscle
5. just beneath the external oblique lies the internal oblique. Make a very shallow longitudinal incision in the external oblique
6. transect and reflect the external oblique to expose the internal oblique
7. make a very shallow longitudinal incision in the internal oblique
8. reflect the internal oblique to expose the Transversus abdominis
9. remove connective tissue

Draw:

10. draw and label **all** CAT muscles of the abdomen

Conclusion Questions for Chest and Abdomen:

- 7a. If a muscle and/or tendon crosses over the **anterior** side of the vertebral column, what movement (action of the muscle) will be performed?
- 7b. Name one muscle from your list above that performs this movement.
- 7c. Draw the **comparable** human muscle, its origin and insertion on the handout provided.
- 8a. If a muscle and/or tendon crosses over the **anterior** side of the ball-and-socket joint of the shoulder, what movement (action of the muscle) will be performed?
- 8b. Name one muscle from your list above that performs this movement.
- 8c. Draw the **comparable** human muscle, its origin and insertion on the handout provided.