

NECROPSY PROCEDURES FOR CATS AND DOGS

Opening of the Thoracic and Abdominal Cavities Together

The opening of the thoracic and abdominal cavities together in the back position is similar to opening them separately in this position. In this respect, there is no difference in the places and directions where the sections pass.

- Since the mesoduodenum is long in the carnivores, the duodenum hangs towards the ventrale.
- For this reason, when the abdominal cavity is opened in the supine position in the dogs, all intestines except the descendens of the duodenum are covered with omentum majus.

Removal of abdominal cavity organs

The intestines are removed from the abdominal cavity organs and the other organs are followed.

1. Removal of intestines

The rule of removal of the duodenum after other intestine sections is also valid here.

The removal of intestine sections other than the duodenum from the abdominal cavity is performed either by dissolving the thin and large intestines separately from the mesenterium or by removing them completely from the mesenterium.

A. Removal of the intestine from the mesentery after the duodenum:

After removal of the abdominal cavity and the omentum and mostly the spleen, the intestines are removed. For this:

a. When the duodenum is pulled towards the vertebralis, secum is formed in the ventral region of the right kidney surrounded by intestines as a comma.

There is also ileum in front of the apex.

b. On the ileum, two ligaments close to the septum are cut and the end of the small intestine is separated from the secret. The ileum is pulled from the cut end, the mesenterium is stretched by lifting upwards.

- Then the small intestines, starting from the ileum to the front of the jejunum to be taken out of the mesenterium to be taken out.
- This process continues until flexura duodenojejunalis, or lig.duodenocolicum.

- When it comes here, the upper intestines are removed and a pair of ligaments are placed and cut. Thus, the ileum and jejunum sections of the small intestine are taken out. Moving to the extraction of secum and colon.

c. The tab is pulled and pulled towards the dorso-cranial.

The septum, the septum and the columns are separated from the mesenterial connections and separated into the rectum with mesenterial lymph nodes.

Once a pair of ligaments are placed in the rectum and interrupted, these intestine sections are taken out.

B. Removal of the intestinal sections after the duodenum without leaving the mesentery:

- a. Close to the last part of the duodenum (near the lig.duodenocolicum, ie to the end of the right lobe of the pancreas) a pair of ligaments are placed on the duodenum and interrupted.
- b. The rectum is located in the pelvis. At the end of the large intestine, two ligaments are placed and separated from the rectum.
- c. Thin and large intestines between the two sections, mesenterium together with the outside of the connection is removed and taken out.

- In this way, the intestine sections removed from the head of the jejunum to the end of the colon are placed on the necropsy desk.
- Mesenterium is cut off with scissors close to the intestinal wall.
- The intestines are placed on the necropsy table to open the lumen as U shaped.
- Mesenterial lymph nodes are also examined.

C. Removal of Duodenum

- The duodenum is removed by a method similar to that of ruminants for the control of the flow of bile.
- Duodenum, along with the stomach and pancreas, or after removal of the stomach is removed with the pancreas with the liver and pancreas or after removal of the liver.

2. Removal of Stomach

- The esophagus is located between V.cava caudalis and the liver and passes through the diaphragm and enters the stomach of the stomach.
- The stomach is pulled backwards to separate the esophagus from the stomach.
- A few cm from the stomach. a bond is placed in front of the esophagus and cut in front.
- Then, the other peripheral connections of the stomach are separated and taken out alone with the duodenum and the pancreas as described above, or separated from the duodenum.

3. Removal of Spleen

The spleen is the first organ after opening the abdominal cavity and removing the omentum.

If not removed, it is taken out of the abdominal cavity during the removal of the stomach.

4. Removal of the Liver

As in other animals, they are removed and removed from their connections.

5. Removal of kidneys

- Kidneys and adrenes are removed from the intestines or from the stomach, duodenum and liver, as well as from other animals.
- The removal is started first from the right kidney and from the adren.
- Remaining after removal of abdominal cavity organs in the recorded order
- Aorta abdominalis and extensions with large veins are checked.
- Similarly, ovarian, uterine section and urinary bladder in this region are also examined.
- If the chest cavity will be opened later, the diaphragm, which is still uncut, is reviewed.

Special Methods

Sometimes alternative methods may be applied in cat and dog necropsy, provided that the special rules do not exceed the basic rules.

Removal of Abdomen and Chest Organs

In this method the organs of the chest and abdominal organs are removed as a whole in order to preserve the anatomical relations (Holoptic method).

- The chest and abdominal cavities are opened together in the back position and cut into the diaphragm. The tongue is pulled out of the mandible and pulled out; the neck organs are exposed and the large intestine is separated from the rectum.
- Then, the tongue, larynx, tracheal, esophagus, lungs, heart, thymus, stomach, intestines, mesenterium and mesenterial lymph nodes and the pancreas and spleen are removed from the whole, respectively, by separating the organs from the tongue and dissecting the organs backwards.
- The removed organs are extended to the cadaver in the necropsy table for examination.
- The remaining organs in the liver, kidney and pelvic cavity are subsequently removed.

Rokitansky Method

- This method, which is applied by Rokitansky, is another form of Holoptic method when it is necessary to examine a large number of human cadavers.
- In this method, the body is removed from the body cavity is examined on the spot.
- If the necropsy area is narrow, the number of elements is low, and most importantly, there are many cadavers, if the organs need to be examined in a short time, this method is applied although most pathological findings are overlooked.
- After opening the body cavities, the organs are removed from their connections without being cut, the sections are examined and examined, if necessary, samples are taken and they are left where they are located again.

Opening of the Pelvic Cavity

The pelvis cavity is opened to remove the rectum with the genital organs and urinary system organs. However, there is no obligation to open any necropsy such as the abdominal and thoracic cavity.

1. Opening the pelvis cavity by cutting the symphysis the pelvis

2. Opening the pelvic cavity with the sections passing from the foreman obturatum

1. Opening the pelvic cavity by cutting the symphysis pelvis:

The muscles are cleaned. The symphysis pelvis is cut from the pecten ossis pubis to arcus ischiadicus.

2. Opening the pelvic cavity with the sections passing from the foreman obturatum

The gap is narrow when the pelvic cavity is opened from symphysis pelvis. The examination and removal of organs in place, especially in large animals like horses and cattle, creates difficulties in the application of adult animals.

The symphysis pelvis is interrupted by passing a little right or left of the pelvis and parallel to it, centering the foramen obturatum.

According to the direction in which the animal lies, the upper of os ileum and os ischii are removed. Transverse cutting of the corpus ilia in front of the foramen obturatum-acetabulum / **side position**

Taking out the organs without cutting the pelvic bones:

It is applied when there is not any tool (chisel, saw).

Application:

- Urinary bladder in males; urinary bladder in female and uterus is held with left hand and pulled into the abdominal cavity.
- With a knife, the perimeter connections of the anus / vulva open to the ring and the organs are pulled by the abdominal cavity.

Opening the Oral Cavity
Removal of Tongue and Neck
Organs

Small Animals

Trachea and esophageal small animals (cat, dog, small ruminant etc.) are removed with other organs such as chest cavity organs (lungs, heart) tongue, larynx, tonsils, thyroid, parathyroid and their associated lymph nodes. After the thoracic cavity is opened, removal of said organs starts by opening the oral cavity and removing the tongue. It follows the removal of the neck organs.

A. Mandible is no cut

1. Spatium on both sides of the mandible, the ramus mandibulae starting from the caudal edges of the ends of the symfysis mandibularis in a section is made.

2. Once the frenulum lingua has been cut, the tongue that is free is removed by the left hand and the tongue is pulled up and back from the spathium mandible.

- After separation from the hyoid bone with a costatome, it is taken out from the cadaver with the larynx as above.

Head separation from cadaver

a. The head is positioned so that the ventral side of the neck and the chin is at the top. In this case, the lower part of the atlanto-occipital joint also overlaps.

b. Left hand by pressing under the chin and pressing the head backwards.

- With the right hand knife, the surrounding tissues of the atlanto-occipital joint are cut. Following this, joints and M. spinalis are cut with a knife and the joint is separated from the joint by stretching.

- Then, head is separated from the neck by cutting the tissues at the dorsal (dorsal side) of the joint .

In some cases spinal fluid should be examined.
In this case, spinal fluid is taken for
microbiological and biochemical examination
without leaving the head.

- For this procedure: a deep section is made on the foramen magnum from the region behind the corners of the mandible, which corresponds to the rear edge of the condylus occipital. Spinal fluid is drawn through an injector.

The spinal fluid can also be removed during the separation of the atlanto-occipital joint. The cerebrospinal fluid can also be removed from the dorsal portion of the atlanto-occipital joint (by the neck). According to this, the muscles between the neck and head lig. The nuchae and other connections are transected from the dorsal to the atlanto-occipital insert, and the area is cleared.

- The head leans forward. The dorsal space of the atlanto-occipital joint (spatium atlanto-occipitalis) is well opened. The needle of the syringe is inserted into the subarachnoidal cavity from the atlanto-occipitalis and the fluid is drawn.

Cranium Opening

During the opening of the skull, the head is held by an assistant to prevent it from shifting to the right or left, or is clamped to the clamp. The surface of this process is easier to do on a spiked metal table.

a. If the skin is still not remove, the skin is extirpated.

b. In order to prevent the muscle parts from entering between the saw teeth and making the cutting difficult, the muscles on the skull and the sides (temporal, especially fossa temporalists) are cut and the area is cleaned.

First, a transversal section is made to the skull to pass through the processus zygomaticus of the os frontale.

It is important to make sure that this section is made in the most domed area of the os zygomaticus immediately after the lateral eye angles.

The skull of the long-nosed dogs is 3 cm. should be cut until aboral.

Otherwise, either the brain is cut or the cavum cranium is not opened .

- The second and third sections pass through the sides. For this purpose, on the one side of the skull (right or left) and on the side of condylus occipitalis (dorso-medial); the second section is made, starting with the foramen occipitale magnum and joining the end of the first transversal section. This also follows the third section repeated on the other side.