

NECROPSY PROCEDURES FOR CATS AND DOGS

- Since the anatomical structure of the stomach and intestines does not differ significantly in cats and dogs, the necropsy method in these animals has not been modified much.
- The method closely resembles the methods applied in other mammals.
- In addition, no separate necropsy method for each species is foreseen.
- It is recommended to use the scalpel and pen instead of a knife to make sections in small size animals and to remove the organs.

Necropsy Position

* Cat and dog cadavers are usually laid on the necropsy table and in the back position.

According to this, necropsy:

1. Back position
2. Side position was performed .

Back position

It is usually applied in small animals.

Advantages:

- It provides convenience in the work of the staff on the two sides of the cadaver.
- Prevents contamination and leakage of collected contents when body cavities are opened.

Side position

It is usually applied in large animals.

Advantages:

- It can be applied easily in areas where work area is narrow.
- It is suitable for single-sided studies with a person.

a. In the ventral of the cranium, the symphysis on the skin is made a cross section extending from the mandible to the symphysis pelvis along the median line.

The point to be considered here is that the cross-section is always passed around the anus with the umbilical area, mammary gland and external genital organs.

In female dogs, the mammary gland passes through the middle as the breasts extend towards the chest.

Particularly in newborn animals, **septicemia related to omphalogen infections** should be intensified so that the umbilical cord should be examined as wide as possible.

b. Cross sections extending towards the feet are made along the medial face of each four extremities, intersecting the above first section.

This is followed by a cross-section of the extremities (mostly in the carpal, tarsal, or 2-3th phalanx joint). Then the skin of the extremities, dorsale (the animal's back) starting from the incisions and laterally swim. The head, neck and body skin is moved to two sides.

c. The skin of the neck region is separated from the first incision along the median line in the ventral to the dorsale and to the base of the ears.

d. The skin of the head skin, the skin around the mouth to stay in the cadaver is completely exposure. Ears remain on the skin that floats.

e. The body skin on the chest and abdominal cavity is also completed by the first incision in the mediastinum and the dorsal swim on the two sides.

During this process, the tail skin is not swollen to recognize the animal, it is left attached to the body.

- **Extirpation of extremities**
- One of the legs is held by hand and opened slightly to the side. With the help of the knife on the right hand, the internal aspect of the leg (between the thorax and the scapula) is separated from the leg muscular connections by the section close to the chest. The same procedure is repeated on the other leg.

Then the leg is stretched sideways on the floor straight. The same procedure is repeated on the other leg.

The front left, front right, rear left and rear right legs are monitored during separation of the extremities.

Opening The Body Cavities

1. Opening the body cavities together
2. Opening the body cavities separate

Opening body cavities separate

In particular, it is preferred when there is liquid such as **transudate, exudate and blood** (hydrothorax, hemothorax, pyothorax, hydroperitoneum, hemoperitoneum) and it should be taken sterile without contamination.

In addition, if the animal is pregnant, neoplastic formation is detected in one of the cavities, and if the suspected disease is localized in one of the abdomen or chest cavity organs, it is advisable to open the cavities separately.

**Separate opening of
abdominal and
thoracic cavities**

Separate Opening of Abdominal Cavities

Back Position

With the help of a knife or scalpel, which is just behind the Cartilago xiphoidea, a few cm transverse section is made. The section's width is changed to size of animal.

All the abdominal muscles to peritoneum are cut.

Yan pozisyonda üst, sırt üstü pozisyonda ise her dört ekstremiten bağlantılarından ayrılarak hayvanın sırtına dik gelecek şekilde nekropsi masası üzerine konulur.

The left and middle fingers are inserted through this section. Under the guidance of the fingers, the abdominal wall muscles and the peritoneum are cut as paramedian along the linea alba to the pelvis, with the sharp side of the blade in the right hand, at a 45 degree angle.

The abdominal wall is stretched due to intravital or postmortal tympanie. In these cases, a more careful treatment is taken. Because the stomach and intestines filled with gas, rupture is possible at any moment.

After the above section, the first transversal section is made behind the sternum. The abdominal wall is cut through the right and left arch ribs to the vertebral column. In this way, the abdominal wall is separated symmetrically and the organs are exposed.

Opening the Thoracic Cavity

The muscles on the right and left sides of the chest are cut off. In order for the ventral and dorsal regions of the costa to be easily cut with a costotome, care is taken to thoroughly clean the muscles in the sternum and near the vertebral region.

The diaphragm is cut to the diameters of the crura diaphragma (with scissors or knife).

From the opened aperture thoracis cranialis, cavity organs are reviewed. In order to prevent the pericardium from being punctured when cutting the rib cage, the hand is inserted into the thoracic cavity and the connection of the pericardium with the sternum is severed from the front to the back. The thoracic cavity is cut.

The thoracic cavity is usually opened by cutting the ribs on both sides of the rib cage from the caudal to the cranial (from the last to the first costa), to the apertura thoracis cranialis.

But depending on whether the animal is large or small, young or old, the sections that are applied on the ribs are used both in different places and also in order to cut, either by using a costatom or knife.

- In order to provide a large working area in the chest cavity in older and large animals, the ribs on both sides of the rib cage are cut from the caudale to the cranial with a costatome close to the vertebral.

- This procedure is performed by cutting the ribs from the costochondral region in small animals such as cats and dogs.

- Since the ossification is not complete in young animals, the sternum is cut directly with a knife in the middle. However, in this case, a narrow space opens in the chest cavity and it is difficult to examine the cavity and remove the organs.

- Another method applied in animals of this age is as follows: The sternum is cut horizontally and the ribs are cut horizontally to the apertura thoracis cranialis.