

NECROPSY PROCEDURES FOR RUMINANTS

Necropsy Position

- Since Rumen occupies a large space in the abdominal cavity, the cadaver is laid on its left side.
- In newborn animals, abomasum is larger than the front stomach. Therefore, if the necropsy of such animals is to be performed in the lateral position, it is preferable to deposit them on the right side.
- However, necropsy of small ruminants and calves are usually performed in back position.

- **Skin Facing and Removing the Extremities**
- Skin ruminants have economic value. In cases where it is not seen to be in use, it is completely free from the cadaver.
- Particularly in newborn animals, **septicemia related to omphalogen infections** should be intensified so that the umbilical cord should be examined as wide as possible
- The limbs are separated after the skin has been removed. The lymph nodes and subcutaneous tissues and muscles are reviewed.

Opening Body Cavities

- **Small ruminants and calves:**

It is opened in the side and back position, together or alone.

- **Cattle:**

As a rule, the abdominal cavity is opened and the organs are removed first in the lateral position. It follows others with opening of the chest, pelvis cavities and removal of organs.

Removal of abdominal cavity organs

- After opening and examining the abdominal cavity, the organs are removed.

Small ruminants and calves:

- The end of the esophagus and the duodenum to the beginning of a double bond was cut to the stomachs; The intestines are removed from the rectum and separated from the periphery.

- **The small intestine is removed in two stages.**
- In the first stage, the initial part of the duodenum, from which the pancreas ducts and ductus choledochus is opened, to the pars descendens is separated for removal by the liver (whether or not parasitic invasions and other causes are checked for bile flow).
- In the second stage, the remaining small bowel portions are taken out.

- **Removal of the starting part of the duodenum:**
- 5 cm above the front part of the duodenum abomasumdan. Interconnect with two bonds are separated and interrupted by the abomasum.
- The cut is held at the end of the duodenum. Mesenterium and environmental connections are cut to the liver.
- After passing the flexura hepatis, a double bond is placed at the beginning of the pars descendens of the duodenum at the level of the domed most of the right kidney.

- From the beginning to the end of the duodenum is separated from the other small intestine and left in place in this way to be removed with the liver.
- The remaining small intestines are removed.
- During these procedures, the bile duct and the channels from the pancreas are not cut.

Removal of the remaining small intestine parts:

Starting from the end of the ileum, not from the part of the duodenum allocated for removal, and the pars descendence of the duodenum separated above. For this:

- a. First the ileum is cut close to the tab. If there is too much water content in the intestine, or if the intestinal content needs to be examined, it is advisable to cut it down on the ileum after a double bond.

- b. Removal of the remaining small intestine parts, starting from the end of the duodenum. For this:
- c. First the ileum is cut close to the tab. If you're looking for the intestine, or if the intestine content needs to be checked, then it will be a good idea to have a good time.

d. The fact that the small intestine is lost between the large intestines shows that the end of the duodenum and the duodenal flexura, lig. Here, the previously uncharacterized part of the duodenum is covered by the large intestine, so there is no possibility of further progress after removing the large intestine.

For this purpose, the large intestine is withdrawn without cutting off and spread to the back of the animal. This results in the pars ascendens of the duodenum.

d. This part of the duodenum is separated from the mesenterium and the flex descendens of the duodenum are folded to flexura caudalis.

f. The large intestines are returned to their normal position.

The remaining pars descendens of the duodenum are separated from their ligaments and the duodenum is removed from the liver.

In this way, the small intestine is removed from the stomach and the mesenterium from the throat to this part of the duodenum.

Removal of large intestines

- The colon and the secum are removed together.
- These sections are either removed from the mesenterium during extraction or removed as they are, and dissolved in the necropsy table.
- The rectum is located first to remove the colon and cervix. The pelvic cavity is pulled out of the pelvic cavity lightly by pulling it out or disconnecting. After leaving the surrounding mesenterium is left to the paralumbal region.

If the large intestines are to be removed from the abdominal cavity by separating from the mesenterium, then the center of the columns starts from the central area, U , ansa centralis where centripetal (**gyri centripedalis**) spirals return to centrifugal spirals (**gyri centrifugalis**). The columns are separated from the mesocolons by knives or scissors starting from this point. The connections with the abdominal cavity are also taken out together with the umbilicus after they are separated.

If it is desired to completely remove the colon and the sachet without opening the column spirals, only the connections of the colon and of the septum with their surroundings are removed by hand and then taken out. In this case the opening of the column spirals is performed outside the cadaver.

Removal of the pancreas

During the removal of the intestines, or more precisely the duodenum, almost all of the pancreas is removed.

Removal of the stomach

- a. The stomach is pulled out of the abdominal cavity towards the left side where the cadaver lies. In the meantime, especially in cattle, **reticulopericarditis traumatica** can be detected by palpable and palpable lesions.
- b. Since the initial part of the duodenum is already separated from the abomasum during the removal of the small intestine, the separation of the stomachs from the esophagus is started. The front stomachs are pulled back a little, a connection is made to the esophagus to enter the stomach and the esophagus is cut in front of this connection.
- c. A small hole is made on the Romanian and the middle fingers of the left hand are inserted and the stomachs are drawn back. In the meantime, with the knife in the right hand, the rumen, omasum and abomasum, the abdominal wall; The omasum is removed from the stomach and the stomachs are taken out.

Removal of spleen

The spleen is removed first in small ruminants and calves without removing the stomach and intestines. In cattle, this organ cannot be reached without removing the rumen because the animal is laid on the left side. Therefore, the **dorso-cranial spleen of the rumen** is removed after the stomachs are removed from the cattle, and most of the time the stomachs are removed from the stomach. Thus, it is ensured that it is not contaminated with rumen content.

Removal of kidneys and adrenals

- If the ureter and kidneys are normal, the kidneys are removed separately from the urogenital organs.
- In order to remove the kidneys from the abdominal cavity, a cross-section from the front to the back is made on the adipose tissue capsule.
- When the kidney is taken out of the kidney bed and pulled back with the left hand, the artery and veins are cut off with the knife on the right hand. As far as possible, the ureters are removed from the kidneys and the kidneys are taken out.
- When a change in the kidney, ureter and bladder is encountered, the kidneys are not removed from the ureters after removal, and the pelvic cavity is opened and removed with the bladder.

- Sever the costal attachments of the diaphragm and remove the liver and diaphragm. Pelvic cuts and removal of urogenital, posterior gastrointestinal tract, brain, and spinal cord are the same as for the dog and cat

Removal of the liver

- The left liver lobe is pulled backwards from the diaphragm. *triangulare sinistrum* is cut. *League. teres* with finger. The liver is pushed backwards and is cut away from the *V. cava* organ (in front of the right adrenal). The sign and middle fingers of the left hand are inserted into the vein.
- With the guidance of the fingers, the left and then the right side are separated by the *cava* edge. Cross sections are extended as much as possible. Meanwhile the *plica* between the liver and esophagus is cut off from the connections with the right kidney. The last *league. triangulare dexter* cut and the liver is taken out.

- When the liver is removed, the gallbladder should not be discontinued. Because microbiological isolation from bile, especially ruminant and salmonella isolation in pigs are made, bile should be taken sterile without detaching the gallbladder.
- Another point is that care is taken when leaving the liver V.cava. fingers are palpated and cut to length after being checked to cut a portion of the liver.

Trachea and the lower 2/3 of the esophagus are chest cavity organs after opening the thoracic cavity in large ruminants such as cattle; The upper 1/3 part is removed by leaving the body together. In small ruminants and offspring, the chest organs are removed together with the tongue.