

THE ANESTHESIA THROUGH INHALATION IN ONE SURGICAL EMERGENCY OF DIGESTIVE TRACT OF A CAT

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Abstract

This paper is based on the clinical experience in emergency surgery in pets, consisting of foreign bodies that remain stranded in certain parts of the digestive tract. We present the clinical case of a cat, 8 years old, European breed, that was brought by its owners at a veterinary hospital with the following symptoms: dyspnea, polypnea, dysphagia, apathy, sialorrhoea, a normal vesicular murmur, normothermia. We made an abdominal ultrasound, took blood for analysis and afterwards, a radiographic exam, a lateral-cervico-thoracic and a ventro-dorsal radiography of the same region. From the data obtained from the owners, the animal never swallowed anything in the past. Until the examination day, there were no signs of illness or another pathology. The biochemical exams showed no alteration of the main organs (the pancreatic, liver, and renal function) and the hematologic parameters were also normal. After the radiographic examination of the cervical region, a foreign body was discovered. It had almost 6 centimeters, was stuck in the anterior third of the esophagus, had a needle-like shape, with one sharp end ventrally oriented, and the other blunt one, dorsally positioned. An emergency surgery was made, with endotracheal intubation and the removal of the foreign body, which was represented by a sewing needle, which had perforated the esophagus, positioning itself transversally through the latero-cervical muscles, and having a ventrally end positioned into the esophagus and the other end, subcutaneous in the dorsal cervical area. Among the emergency surgeries in pets, foreign body pathology has an important role, because of the need to establish a quick diagnose and to treat the animal as fast as possible. The clinical and radiological exam has tracked down a foreign body in the esophagus. We used endotracheal intubation for the anesthesia. Through specific and adequate surgical maneuvers, we managed to extract the foreign body. Knowing the animal's habits has an important role, thus making the diagnose and treatment more accurate and not to threaten the animal's life.

Key words: emergency, anesthesia, digestive tract.

INTRODUCTION

This study approaches one of the currents of veterinary medicine, emergency medicine in fact. Most of the times, the fast actions of the vet may mean the difference between life or death. This work is based on the clinical experiences in emergency medicine of pets, of a private clinic, consisting of foreign bodies that remain stranded in various portions of the digestive tract. In such a situation, the first thing we have to do is to ensure the safety of the respiratory pathways, breathing, circulation and the assessment of the potential external hemorrhages.

MATERIALS AND METHODS

We present a clinical case of an apart complexity. We are talking about a cat, 8 years old, European breed, that was brought at a

veterinary hospital with the following symptoms: dyspnea, polypnea, dysphagia, apathy, sialorrhoea, a normal vesicular murmur, normothermia, normal cardiac output, normal blood pressure.



RESULTS AND DISCUSSIONS

From the data obtained from the cat's owner, we noticed that it had never eaten any other foreign body. Until the examination day, there were no signs of illness and no other pathologies.

Abdominal ultrasound results: the liver had easily increased diameters, the gallbladder had a slightly transonic content; the kidneys had a normal shape, no dilations, both kidneys had hyperecogenous images, probably microscopic stones, and the urinary bladder had a large amount of hyperecogenous deposit.

Biochemical test results: GOT-34.5, GPT-47.1, GGT-6.4, FA-57.8, BIL-0.5, PR-7.8, ALB-3.2, UREE-35.4, CRE-1.2, ALFA AMIL.-1548, GLI-65. The biochemical results showed no alteration of the main organs (normal liver, pancreatic and renal function).

The hematological results: WBC-15, LYM-2.1, GRA-10.3, RBC-8.5, HGB-17, HTC-42, MCV-70, PLT-218. Neither these parameters were not altered.



Figure 1. The biochemical and hematological laboratory

After the talk with the owners, the biochemical, hematological and ultrasound investigations, we started the radiological investigation. When the cranial-cervico-thoracic region, in a lateral and ventro-dorsal position was examined, a foreign body was discovered. It had almost 6 centimeters, was stuck in the anterior third of the esophagus, had a needle-like shape, with one sharp end ventrally oriented, and the other blunt one, dorsally positioned.



Figure 2. The cranial-cervico-thoracic region, ventro-dorsally examined



Figure 3. The cranial-cervico-thoracic region, laterally examined

We had to proceed to an emergency surgery, with endotracheal intubation. The intubation procedure was a very difficult one, because of the foreign body's positioning in the trachea. The surgery was a catchy one, because after the intubation, the animal was apneic, and the pulse was weak and it had a low oxygen saturation.

In the first step, we dissected the cervical region, to bear away the anatomic structures and not to threaten the animal's life when the foreign body was removed. We managed to extract the foreign body, in fact a sewing needle that had attached to itself about 40 centimeters of string. It had perforated the esophagus, positioning itself transversally, with one end situated laterally from the tracheal rings and the other one, dorsally subcutaneous, after it had perforated the cervical muscles. The string that was attached to the needle got into

the cat's stomach, and it was removed at the same time as the needle.

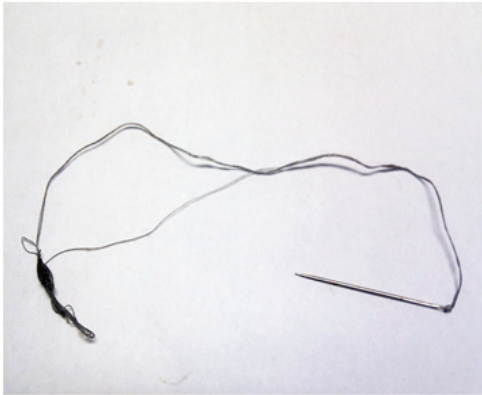


Figure 4. The sewing needle and the string in the animal's esophagus

CONCLUSIONS

The clinical and radiological examination tracked down the esophageal foreign body.

The surgery was made with endotracheal anesthesia.

Through specific and adequate surgical maneuvers, the foreign body was successfully extracted.

Knowing the animal's habits allows a proper and fast diagnose and an adequate treatment.

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