

## **Anatomy study of esophagus and stomach of a two heads and two necks calf**

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The stomach of the ruminants has a great importance in the medicine veterinary and in the zootechnical production. The calf stomach has four compartments: the rumen, reticulum, omasum and abomasum. The rumen is a large mixing vat and occupies almost all of the left half of the abdominal cavity. The ruminal mucosa contains numerous conical papillae to increase the surface area for absorption. The reticulum is the foremost part of the stomach. It lies beneath ribs 6-8, just behind the diaphragm and liver and its mucosa is similar to honeycomb. The omasum is the smallest part of the stomach. It is oval in shape and sits on the right side of the abdominal cavity. Its interior is divided by large longitudinal folds of tissue, like pages in a book. The abomasum is about twice the size of the reticulum, but elongated in shape. It lies on the right side of the abdominal cavity and is the chemical stomach with folds into its mucosa. The congenital anomaly is characterized by the union of body parts between identical individuals. This type of anomaly corresponds to one of the biggest groups of congenital malformations in the bovines. The objective of this research is to compare the anatomical aspects of the esophagus and stomach of a normal calf with the esophagi and stomachs found in the calf of two heads and two necks. A stillbirth calf, female sex, with two heads, two necks, one trunk and four members, that came from the municipality of São Lourenço da Mata, Pernambuco was brought to the Pavilion of Anatomy in the Rural Federal University of Pernambuco. There has been injected by the umbilical cord formaldehyde at 10% and then dipped in the same solution. Then it was initiated the dissection of the ventral cervical region until the pubic region. There was the incision of the skin, muscles and ribs to observe the organs located in the ventral region of the two necks and in the thoracic and abdominal cavity. After the opening of each cervical region, thoracic cavity and abdominal cavity, it was observed the presence of two esophagi. The stomach of the calf was doubled, that is, two rumens, two reticula, two omasa and two abomasa. The stomachs were united by the visceral face of the left stomach and by the parietal face of the right stomach. The rumens were less developed than the abomasa, occupying less of the half of the cavity, different from the normal anatomy. When opened, the rumens presented normal papillae. The reticula, as described in the literature, presented well-defined forms, with mucosa similar to honeycomb. The two omasa were found with normal localization and with normal mucosa. The abomasa was well developed and with liquid inside. The location and mucosa of the abomasa were similar to one calf with normal anatomy. There are needs of more depth studies about the morphology of the digestive system on this animal, and such cases must be reported to find the incidence of such anomalies.