Emphysema of the Guttural Pouch

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ew to get the results of the case. The owner stated that the ewe had lived about a week after being presented at the clinic. He noticed that she was attempting parturition and he assisted her in delivering a dead lamb. The next morning the ewe was dead. The owner opened the abdomen and found another lamb in the uterus which appeared to have been dead for a long time. The abdomen was also filled with a great quantity of fluid which, he said, resembled urine. The owner believed that if help had been accorded the ewe a little sooner, at least one lamb would have survived.

This case was very unique in the fact that rupture of the prepubic tendon is rare in the ovine. It also appears strange that degeneration would take place in an animal so young. It is very problematical as to whether or not the strain of jumping over the ten inch sill aggravated the condition in any way.

—B. T. Huso, '42

**Emphysema of the Guttural Pouch.**

On Feb. 4, 1941, a two-year-old chestnut stallion of the American Saddle breed was presented to the clinic. Last fall, the animal had suffered an attack of equine influenza and had evidently completely recovered from the attack. At the time the stallion was brought here, it had an enlargement of the throat region, the left side being very much enlarged, and the right side only slightly so. The enlargement was very soft, and upon palpation, was found to be caused by air in the guttural pouch. The history which accompanied the case was that the animal had been operated upon several times previously, but without success. The caretaker stated that the swelling would appear in one or two days following the operation and would remain distended until operated on again.

Observations were made each day from the 4th until the 10th of February, and
the swelling neither increased nor decreased. 

It was decided that the animal would be operated on the 11th of February. An ounce and one-half of chloral hydrate in 2 percent solution was given as a basal narcotic by way of a stomach tube. The horse was placed on the operating table, the emphysematous area shaved, and tincture of iodine was applied. The area of swelling extended from the base of the ear to the throat region. The skin and underlying tissues in the area of intended incision were locally anesthetized with 2 percent procaine. A skin incision was made so that the parotid gland and posterior auricular vein were exposed. The guttural pouch protruded because it was distended with air. The vein was ligated with No. 18 black silk suture. The surgeon then took a 14 gauge needle and inserted it into the guttural pouch. The swelling immediately disappeared as the air rushed out of the pouch. The opening into the pouch was made larger in attempt to locate the opening into the pharynx. Not being able to find the opening, the surgeon placed a mouth speculum on the animal and located the opening by passing a Gunther's catheter through the left nostril into the pharyngeal orifice of the eustachian tube. The mucous membrane around this opening was removed by cutting and tearing on the lateral side of the wall of the pharynx. This was done in an attempt to set up a proliferation of connective tissue which would completely occlude the opening of the eustachian tube into the pharynx, and thus stop the emphysema. Two sutures of No. 4 catgut were then used to close the opening of the eustachian tube into the guttural pouch. Eight gauze packs, saturated with 10 percent copper sulfate solution, were placed in the guttural pouch to destroy the mucous membrane favoring adhesions and occluding the entire guttural pouch. Ten interrupted sutures were then made with No. 4 catgut, leaving an opening so the packs could be withdrawn in 24 hours. The skin incision was sutured with No. 18 black silk suture, the animal removed from the table, and returned to its stall. 

The next day the copper sulfate packs were removed. Potassium permanganate (1-3000) was used to irrigate the wound. Boric acid and urea were applied topically as a dusting powder. Petrolatum was used around the wound to facilitate removal of the exudate. This was the routine treatment. The horse's pulse, respiration and temperature deviated very little from normal at any time. In sixteen days the wound was almost completely closed, and very little exudate came from within. 

At different times during the administration of potassium permanganate solution by means of a bulb syringe, the solution could be seen trickling out of the left nostril in small amounts. This showed that the opening into the pharynx was not completely closed.

All treatment was stopped on the 13th of March. He was apparently healed, as there was no evidence of an enlargement other than that caused by scar tissue where the wound healed.

The surgeon was to hear from the caretaker should the condition recur. To this date he has had no report.

—George H. Gitz, '42

9 Ruptured Spleen. On the morning of Dec. 23, 1940, the author was summoned to see a four year old Holstein cow. The owner said she had become ill the previous day.

The history was that she had gone off feed the night before, her milk flow had decreased considerably, and she was listless and weak. The temperature was 107.4º, pulse 92, respirations were increased, labored, and abdominal in type. An exudate was noted at the nostrils, the cow was coughing, and had a slight diarrhea. On auscultation of the lungs, moist rales were heard. A diagnosis of pneumonia was made. The cow was given 125 cc. of Neoprontisil.

Another cow with similar symptoms had suddenly died that night and the cadaver was sent to the rendering plant. It was then decided to go to the rendering works and perform an autopsy on the cow.

—The Veterinary Student