Ruptured Spleen

R. S. Kufrin
Iowa State College
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 Ten interrupted sutures were then made with No. 4 catgut, leaving an opening so the packs could be withdrawn in 24 hours.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.

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 107.4°, 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
cadaver. If this cow showed pneumonia, necessary precautions should be taken to protect the other cattle.

When the skinner removed the skin it was noted the subcutaneous tissues and muscles were decidedly anemic. The ribs and abdominal muscles were removed and the lungs were white. The heart seemed normal in every way, except that the chambers were empty. The rumen showed nothing unusual, and when the spleen was removed a tear was noted on the posterior border of the visceral surface about six inches from the ventral extremity. A coagulated mass of blood was found around the abdominal viscera.

There was no connection between the death of this animal and the one that was sick. It was decided that vaccination of the herd against pneumonia was not necessary unless other animals became ill.

The cow with acute respiratory disturbance made an uneventful recovery in a few days.

—R. S. Kujrin, '41

Milk hygiene is in its infancy. Two or more decades ago there were no regulations at all in many places and any person or farmer with two or more cows and a bucket was allowed to call himself a dairymen and could peddle milk to anyone willing to buy it.

Work at several state experiment stations, at the agricultural research center, and regional poultry laboratories indicates that genetic resistance to the fowl paralysis complex exists in many strains of poultry.

Although not so rated (as yet), diseases of domestic animals are agriculture's greatest problem and using veterinary science to the best advantage is its greatest obligation. An important project of the profession is improving its public relations to such an extent that its place in national economics will be more generally understood.

_Spring—1941_