1946

Posterior Paralysis

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101.2° F., and the pulse was rapid and weak (120). The urine was acid in reaction. Considering the history and the symptoms presented above, a tentative diagnosis of enterotoxemia was made.

**Treatment**

The treatment administered to the animal the first day consisted of an enema of 4 gallons of water with ½ pound of magnesium sulfate. A drench was given per os of 4 ounces of sodium bicarbonate and 1 ounce of bovine tonic (gentian, nux vomica, and tartar emetic). The treatment given on the second day was similar that given on the first day. The third day the animal showed additional symptoms which were a jerking movement of the head, grinding of the teeth, inability to stand and blindness. These new complications with the developing nervous symptoms made the prognosis unfavorable, and since death was evident, euthanasia and a necropsy were performed.

The report from the necropsy was that of a well-marked, diffuse catarrhal enteritis, mucous colitis and a wide-spread, severe interstitial emphysema. No impaction or obstruction was found in the gastro-intestinal tract. The mineral oil and other material administered were found lying in the rumen and seeping posteriorly. This indicated that there was a complete atony of the whole gastro-intestinal tract.

This is the third case of this type that has been in the clinic this spring of 1946. All of them had been fed corn fodder in their ration. Each animal showed a marked toxemia and gastro-intestinal atony. With these factors in mind, the possibility of some toxin being present in the corn stalks can not be overlooked. However, corn-stalk toxemia could not be definitely proven and since the literature on this subject is incomplete, further observations must be made and more data collected before corn stalks can be considered the cause of this disease in cattle.

—R. T. Howard, '47

**Posterior Paralysis.** The patient in this case was a 2½-year-old, female albino Pekingese. The animal was presented at the Stange Memorial Clinic December 14, 1945, with the history of having not been able to use its rear quarters during the previous week. The symptoms presented were complete paralysis of the rear quarters and when the animal attempted locomotion, it was forced to drag these parts.

This condition was diagnosed as posterior paralysis due to a vitamin B deficiency.

**Treatment**

The patient was treated as follows:

Dec. 15 to Jan. 3—Two cc. of vitamin B complex was administered per orum and 1 cc. of thiamine hydrochloride subcutaneously.

Jan. 4 to Jan. 21—Brewer’s yeast tablets were given. At this time it was reported that the animal still had a slight ataxia in the rear quarters, but was able to stand.

Jan. 23 to Jan. 25—The patient was continued on Brewer’s yeast, and could stand, walk, and run with some incoordination still present.

Jan. 26 to Jan. 28—Brewer’s yeast tablets were given with continued improvement, but the animal seemed to lose its balance when it attempted to turn.

Feb. 4—The animal was discharged, being able to handle itself fairly well, but still showing some incoordination during rapid motion.

In the treatment, the injections of vitamin B complex and thiamine hydrochloride that were given subcutaneously were responsible for correcting the deficiency which was the cause of the paralysis. The Brewer’s yeast tablets were given after the deficiency had been corrected to maintain a high level of the vitamin to aid in the repair of the nerve tissue that was affected.

In treating conditions such as this, it is first necessary to determine whether or not the paralysis is due to trauma, as the
treatment will naturally vary with the cause. Therefore, diagnosis is of primary importance being made mainly by the process of elimination through the use of history of possible injury, diet, and X-ray pictures. If nothing is present indicating trauma or intervertebral involvement, and if the diet lacks meat or vitamin B, a deficiency of this vitamin may be diagnosed and improvement expected by therapy if the condition has not progressed too far.

The vitamin B complex mixture used consisted of the following in a 5 cc. solution:

- Thiamine HCl .......... 10 mgm.
- Riboflavin ................. 10 mgm.
- Pyridoxine HCl .......... 5 mgm.
- Ca Pantothenate .......... 50 mgm.
- Nicotinamide .......... 250 mgm.

The Brewer's yeast tablets used were made up of:

- Vit. B1 .................. 25 I.U.
- Vit. B2 .................. 25 gammas
- Vit. B6 .................. 15 gammas
- Pantothenic acid .......... 60 gammas
- Nicotinic acid .......... 175 gammas

Recto-Vaginal Tear. On April 23, 1946, a 7 year old mare and foal were presented at the Stange Memorial Clinic. The mare had given birth to the foal earlier in the morning.

The rectal and vaginal mucosae were badly torn with considerable loss of tissue from the septum between them and their was extensive edema of the vulvar region. The placental membranes were retained.

The foal was very weak and could not stand. Blood transfusions, mare's milk, and a special formula consisting of 4 tablespoons of lime water, 2 teaspoons of table sugar in ½ quart of whole milk were given to the foal, but it died approximately 48 hours after admittance to the clinic. Cultures taken revealed Escherichia coli present in the heart blood.

The mare was given chloral hydrate intravenously. A dark gray exudate was present between the placenta and the wall of the uterus. The placental membranes showed considerable necrosis and were removed with difficulty. Linen sutures were used to close the recto-vaginal tear and 6 number 10 capsules of sulfanilamide were placed in the uterus. There seemed to be considerable loss of tissue between the rectum and vulva which was attributed to pigs. Mares normally stand when giving birth to foals but with this recto-vaginal tear it is thought she took a recumbent position and thus the pigs gained access to her.

Three quarts of mineral oil were administered per orum daily to maintain proper consistency of the feces and reduce irritation of the torn area. General wound treatment was administered post-operatively.

On the first post-operative day the sutures were partly torn loose and feces were being forced into the vagina through the tear. Irrigation of the recto-vulvar region with potassium permanganate (1:3000) was employed. It was impossible to suture again the edges of the wound because there was not enough tissue to work with.

On May 9, 1946, the mare was discharged with the recto-vaginal tear still present to a certain degree, but with the edges healed. The owner was advised to bring her back to the clinic for further surgical treatment at a later date, after there had been complete healing of the lacerated tissue.

It is possible that artificial insemination would be a successful breeding procedure for this mare at a later date.

Blood of the porpoise is more like human blood than that of most animals. The sea-going mammal shows close affinities with oxen and pigs.

Human brucellosis in Mexico, according to the Castenada, is in the vast majority of the cases of the melitensis (goat) variety; the percentages of being: 1.3 suis, 3.5 abortus and 95.2 melitensis.