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**Title** Diaphragmatic hernia in a horse

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nificant. Calculations were based on all inseminationswhether during the 1st, 2nd, or 3rd estrous period-and every failure to become pregnant was counted in the total. Because pregnancy rates for the treated and untreated mares were low and not significantly different, it is likely that the mares returned for service because of failure in the fertilizing capacity of frozen semen. Therefore, adequate data for studying the effect of HCG on rate of pregnancy are not available.

From the analysis of these data, it is concluded that between 24 and 48 hours after 1st administration (on day 2 of estrus) of 2,000 I.U. of HCG, 3 times as many treated mares as untreated mares will potentially be inseminated or mated nearer the time of ovulation. Induction of ovulation within a precise time limit could have some economic and physiologic value by reducing the number of inseminations or breedings per estrus and improving fertility. After the 3rd administration of HCG, however, response was not as favorable, in that ovulation did not occur within a precise time interval. The reason for the change in response is not known.

## References

Davidson, W. F.: The Control of Ovulation in the Mare with Reference to Insemination with Stored Semen. J. Agric. Sci., 37, (1947): 287-290.
 Day, F. T.: Clinical and Experimental Observations on Reproduction in the Mare. J. Agric. Sci., 30, (1944): 244-261.
 Ginther, O. J.: Some Factors Which Alter Estrous Cycle in Mares (abstr. of unpublished report). J. Anim. Sci., 33, (1971): 1158

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In Mares (abstr. of unpublished report). J. Anim. Sci., 33, (1971): 1158. 4. Ginther, O. J., Whitmore, H. L., and Squires, E. L.: Characteristics of Estrus, Diestrus, and Ovulation in Mares and Effects of Season and Nursing. Am. J. Vet. Res., 33, (Oct., 1972): 1935–1939.

1972): 1935–1939.
5. Loy, R. G., and Hughes, J. P.: The Effects of Human Chorionic Gonadotropin on Ovulation, Length of Estrus and Fertility in the Mare. Cornell Vet., 56, (1966): 41–50.
6. Mirskaja, L. M., and Petrapavlovskii, V. V.: The Reduction of Normal Duration of Heat in the Mare by the Administration of Prolan. Probl. Zivotn., 4, (1937): 22–39; Anim. Breeding Abstr., 5, (1937): 387.
7. Nishikawa, Y., Kuroda, N., and Yamazaki, Y.: Studies on Artificial Induction of Ovulation in Mares. II. Effect of Increased Doses of Prolan and Copper Sulfate. In Studies on Reproduction in Horses. Japan Racing Association, Tokyo, Japan (1959): 181–186.

Japan (1959): 181–186. 8. Webel, S. K., Ellicott, A. R., and Dziuk, P. J.: Control of Ovulation and Maturation of Pony Eggs (abstr. of unpub-lished report). J. Anim. Sci., 31, (1970): 1036.

## CLINICAL ITEMS



A 7-YEAR-OLD mare of mixed breeding was examined because the owner suspected "sleeping sickness." The mare had been ill for 2 days. Rectal temperature was 103.4 F. (39.7 C.), heart and respiratory rates were moderately increased; visible mucous membranes and capillary refill time seemed normal. The mare was able to run, walk, turn, and back up normally. Although somewhat depressed, she became alert when approached. Peristaltic sounds were heard on both sides of the abdomen. Lung sounds were more prominent on the left than on the right side of the thorax but abnormal sounds were not noticed. There were no signs of colic. Treatment was nonspecific: fluids, antibiotics, corticosteroid, and antihistamine. The horse was eating some hay and drinking water. The owner was told to watch for signs of colic as impending abdominal distress was suspected.

The horse died within 12 hours. Signs of colic were noticed prior to death. Necropsy revealed the cause of death to be strangulation of the small intestines through a diaphragmatic hernia. The rent was in the right hemidiaphragm, about 6 cm. dorsal to the hiatus for the caudal vena cava. The edges of the torn diaphragm were thickened and fibrotic. About 1 m. of small intestine and a portion of omentum occupied the right side of the thorax, collapsing more than half the lung. The loop of intestine was gangrenous and distended with gas and fluid. Serosanguineous fluid and evidence of pleuritis were noticed.

The cause of the hernia could not be ascertained. The mare had been pastured with several other horses, but the owner had not noticed any aggressive behavior among them.—Ned Buyukmihci, V.M.D., Turlock, Calif. 95380.

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