



AFTER OFFICE HOURS

ONCE AN OBSTETRICIAN, ALWAYS AN OBSTETRICIAN

ON Oct. 1, 1964, I became a temporary member of the St. Anthony Hospital of the St. Anthony, Newfoundland, section of the International Grenfell Association. I am in charge of the Department of Obstetrics and Gynecology and, since the community is without the services of a veterinarian, what could be more appropriate than to be called in to care for our quadruped cousins when they are in obstetric trouble? I must admit however, that I approached the operation herein described with considerably more ap-

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The illustration used in this section is "The Medieval Doctor," a 15th-century German woodcut. (The Bettmann Archive)

prehension than I usually feel when I am about to perform a cesarean section on one of my own species.

At about 5:02 P.M., Feb. 3, 1965, as I was putting on my coat to go home through a driving snowstorm, the head farmer and dairyman in charge of some 20 head of Holstein cows approached me with an expression of profound worry and asked me if I could not help him deliver one of his heifers, a primigravida that had gone into labor some time during the preceding night. When seen at the morning milking hour, the fetus was found to be presenting by both hind feet. The common method, traction on the calf's feet with a rope noose, had been attempted several times during the course of the day without success. Unsuccessful attempts had also been made to break up the impaction by introducing the hand and arm of the operator as far as the elbow. Uterine contractions continued every 2-3 min. and, by nightfall, the patient was becoming exhausted.

At this point, Dr. John Cronhelm (North Ireland), anesthesiologist, Dr. Willem Reinking (Holland), assistant in the Department of Surgery, Nurses Doreen Dick (Scotland) and Sue Stephenson (Canada), and I (American), with numerous other interested and concerned parties were driven in the Grenfell Association garbage truck to the barn. Dr. Reinking brought along the big set of instruments used in abdominal operations and graciously lent us by our head operating room nurse, Margie Simms.

The barn was nicely warmed by the body heat of some 20 cows and the bull in the stall next to where our patient lay on clean hay on the concrete floor of one of the two labor and delivery stalls. Since it is customary in some "enlightened" maternity suites for the father to watch the delivery (at least until he faints), Father Bull stood looking over the 5-ft.-high partition at the goings-on. He was very calm, even to the point of appearing bored.

After a preliminary trial with traction on the calf's feet, and another up-to-the-elbow examination, it was decided to proceed with cesarean section in order to save the cow for this period of lactation even at the possible expense of a dead fetus. Our own stethoscopes were not equal to the task of locating the fetal heart tones. Dr. Cronhelm, who had previously anesthetized a cow, proceeded to administer intravenous Pentothal and later Xylocaine through one of the large superficial abdominal veins. Four of the native Newfoundlanders now rolled the cow on her back so her legs were held up in the air at right angles to her body. We did not shave her as there was but little hair on the mid-abdomen. After liberally painting the area with tincture of iodine, the nurses handed us instruments from a sheet on the stall floor. We kneeled, as we did not have the luxury of a suitable operating table.

The site of the incision was from just cephalad of the center of the udder to and through the umbilicus (very small in this cow) for a total of 18 in. The largest available new Bard-Parker blade cut through the hide very easily, much to our surprise, and the pregnant left uterine horn came to view. This structure appeared to have a very thin wall similar to that of the lower uterine segment of a woman who has had a prolonged test of labor without progress. This is not strange when one compares the uterus of the cow with a bicornuate human uterus in which musculature is similarly arranged. The two horns in the bovine uterus are joined by the intercornual ligament for about half their lengths. The pregnant left half of the uterus was now incised longitudinally for about 18 in. This permitted easy decomposition of the impacted fetus, and the hind legs of the calf were brought back through the uterus and out through the uterine incision. It took the combined brawn of operator and assistant to complete delivery of the 80-lb. calf through the uterine incision. At some point in this maneuver, the umbilical cord was ruptured.

It seems that normally in the process of delivery in the cow, the cord ruptures. There was no bleeding, and we turned over the very limp and seemingly lifeless calf to anesthesiologist Cronhelm, who sucked out mucus and amniotic fluid using a piece of rubber tubing. By the time we had finished the operation, the calf was trying to suck.

As is customary in cesarean section in the cow, excess membranes protruding through the incision were trimmed away, but no attempt was made to remove the placental tissues. According to Roberts,¹ the bovine placenta is of the cotyledonary type with 75–120 caruncles. The convex uterine caruncle is elevated about the endometrium like a button, with the concave fetal cotyledon grasping it. It was my impression that the two caruncles which we saw measured about 6 cm. in diameter. The fetal and maternal surfaces of these caruncles are so intimately apposed that it is impossible to separate them at section, nor should any such attempt be made. In this case, the entire remaining membranes and placental structures were spontaneously extruded during the night after the operation.

The uterine incision was closed in two layers by lock-stitch with No. 1 chromic catgut. Peritoneal and fascial layers were closed with interrupted heavy silk, and the skin with similar material. Convalescence was uneventful, the mother eating hay the next morning as if nothing had happened and the calf sucking happily.

Now the mother will live out this lactation span and will be slaughtered after that, as dairymen do not incline to repeat sections. The calf will be converted to veal, as he is not needed for breeding. I should add that 6 million units of slightly outdated penicillin were given the cow intramuscularly on 2 consecutive days immediately following the operation.

So ends this little adventure. Perhaps some of our gentle readers would be interested in coming up to work with the International

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Grenfell Association. Help is always welcome, life is worth living, and there is never a dull moment. Our Medical Superintendent and Chief Surgeon, Dr. Gordon Thomas, recently operated on a big black dog with acute torsion of the spleen on its pedicle. Incidentally, there is a wealth of patients for abnormal obstetrics here and on the Labrador coast, to say nothing of all the other specialties of medicine and dentistry. Those interested, should write to Dr. Gordon

Thomas, care of I.G.A., St. Anthony, Newfoundland.

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REFERENCE

1. ROBERTS, S. J. *Veterinary Obstetrics and Genital Diseases*. Ithaca, N. Y., Published by the author, 1956.

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