

Bellwether

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Emergency Service At

V H U P

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A couple comes home in the evening and finds that the family pet, a miniature poodle, has difficulty breathing and appears to be sick. Their regular veterinarian cannot be reached, so they contact the emergency service at VHUP. They describe the symptoms and are told to bring the dog to the hospital. When they arrive at the emergency service waiting room and check in, it is noted that the animal is in critical condition. A technician immediately takes the dog to the treatment room and a student escorts the couple to another room to take the case history. While this is being done the dog is examined and readied for emergency care.

"We prefer that owners call before bringing their pet in, so we can have things set up and start treatment at once if necessary," explained Rebecca Kirby, D.V.M., head of emergency service at VHUP. This approach is similar to one used in emergency rooms in human hospitals. Indeed, the atmosphere and equipment in the emergency room at VHUP are reminiscent of any hospital emergency room. There are examining tables, EKG equipment, IV drip stands, and trays with sterile equipment. There are no beds, but a number of cages are available to accommodate the patients.

Many of the emergencies are also similar: heart failures, car and fight injuries, gunshot wounds, broken bones, and a host of problems which can occur in animals and humans alike, while some of the cases treated occur only in animals. The big difference between veterinary and human emergencies is that the veterinarian deals with a variety of species and patients that cannot explain their own problems. The doctors at VHUP must rely on the owners to obtain vital background information.

"When an animal is brought in, the most important thing is to stabilize it quickly and to diagnose the problem," Dr. Kirby said. "We have a specially trained staff here which is available around the clock. In addition we can consult with any specialist needed."

The miniature poodle is a typical case. It is ten years old and has congestive heart failure. After the initial examination and diagnosis it is placed into the oxygen cage, a piece of equipment large enough to hold a giant dog. Here the amount of oxygen can be carefully regulated making it easier for animals with heart problems to breathe. The controls on the cage also permit the adjustment of humidity of the air in the cage, a therapeutic aid for animals with respiratory problems.

Once the dog is placed in the cage and is breathing easier, the intern discusses the problem with the owners. "We proceed with definitive treatment after we have discussed the diagnosis and therapy with the owner and have received authorization to do so," Dr. Kirby said. In this case, treatment includes medication to dilate the air passages, diuretics to reduce the fluids in the

lungs, and digoxin to strengthen the heart muscle. Between treatments the dog is returned to the oxygen cage. Later, when it is stable, an EKG and x-rays are taken. These facilities are available around-the-clock.

An animal with congestive heart failure may also be connected to a heart monitor with an oscilloscope to permit close monitoring of the condition. The service also has special equipment which monitors an animal's body temperature and blood pressure. Later, bloodtests are done to determine liver and kidney function. The emergency service has full laboratory services until 10:00 p.m. daily. After 10:00 p.m. simple tests can be executed but the more complicated ones are held until the laboratory opens the next morning.

Often a critically ill animal, such as the miniature poodle, is transferred to the intensive-care unit of the hospital once it is stabilized. Here it is closely watched and any changes are reported at once to the intern in emergency service so that decisions regarding the animal's treatment can be made quickly. Should elaborate diagnostics such as an echocardiogram or an angiogram be required, the cardiologist on duty may be consulted at any hour of the night. In the morning, the dog is transferred to the cardiology service which then assumes responsibility for the case. "Very frequently such an animal can be stabilized on heart medication and do well at home," Dr. Kirby said.

This particular dog is just an illustration of one type of case seen in the emergency service. Another case of critical nature is gastric dilatation which requires prompt attention and often surgery if the animal is to be saved. "We have a sixty percent success rate quoted by the surgeons," Dr. Kirby said.

Many cases seen involve injuries received when an animal has been hit by a car. These animals are often in shock and have to be stabilized before surgery or elaborate diagnostics can commence. "It is a very intense situation, one must make the right decisions quickly and one must know what to do next if something doesn't work," Dr. Kirby explained. "We see patients around-the-clock, it is a steady stream. The busiest time is between 6:00 p.m. and 2:00 a.m. People come home and discover that their pet is ill and that their veterinarian is not available. Also, many animals run free and are injured by cars." During the period of July 1, 1981 to June 30, 1982, the emergency service saw over 5,200 cases. Currently, up to thirty cases are seen per day and this can increase to fifty or more on weekends and holidays.

Still another category of patients are those animals referred by veterinarians for special treatment or a diagnosis. These ani-



Dr. Rebecca Kirby examines a radiograph in the emergency room

imals are often too ill to wait for an appointment in the regular clinics and are admitted to the specialties through the emergency service. "Many veterinarians utilize this service," Dr. Kirby said. "It is a speedy way of getting a critical animal admitted."

The emergency service sees many species of animals, ranging from cats and dogs to hamsters, gerbils, exotic pets, and wildlife. The latter are transferred to the student-run Wildlife Service at the hospital. Sometimes animals with contagious diseases are brought in and placed in the special isolation unit at the hospital.

In addition to seeing patients, the staff also provides information over the telephone in an attempt to determine whether an illness is really an emergency. "We often can help by phone, but we will see an animal if the owner feels it is a life-threatening situation," Dr. Kirby explained.

Dr. Kirby arrived at VHUP in August from San Diego, California, where she was

one of several veterinary specialists at an emergency hospital. She has restructured the service at VHUP. "We have three rotating shifts, twelve hours each, for the three interns on duty during the week. On week-ends three different interns rotate these shifts. These run from 6:00 a.m. to 6:00 p.m. with an overlapping shift from 2:00 p.m. to 2:00 a.m., so that two interns are on duty during the busiest time," Dr. Kirby said. "In addition there are three nurse-technicians who similarly rotate shifts. The nurse-technicians are trained to handle injured animals and perform many tasks, freeing the interns to take care of the critical problems." Students also share the work and are active participants in patient care.

As part of the curriculum, students spend two weeks on duty at the emergency service on rotating eight-hour shifts. They interview the owners, examine the animals, and discuss their findings with the intern or clinician who makes the final diagnosis and

determines treatment. It is an intense learning experience for students and the School is the only one which has a twenty-four-hour emergency service. Because the Veterinary School is located in an urban center, a great variety of cases are seen here making the program valuable training. Many students come from other schools to work in the emergency service to receive this special training.

Dr. Kirby is on call around-the-clock. "Animal illness and injury creates a very emotional situation for owners because it can be acute and is often unexpected. Because we provide quick, efficient service and have a wonderful back-up from the specialties here, owners of the animals feel that everything that can be done is being done."

Emergency service is open 24 hours a day, every day of the year, and it can be reached by calling (215) 898-4685.

Endowed Chairs

One of the major steps in the evolution of the School of Veterinary Medicine to a position of world prominence has been the development of endowed chairs. The first was the Lawrence Baker Sheppard Professor of Surgery in 1967, and the most recent was the Grace Lansing Lambert Professorship in Cell Biology. The following is a list of endowed chairs and the present occupant:

- Corrine R. and Henry Bower Professor of Medicine (Nephrology): Kenneth C. Bovee, D.V.M., M.Med.Sc.
- Jacques Jenny Associate Professor of Orthopedic Surgery: David P. Nunamaker, V.M.D.
- Charlotte Newton Sheppard Professor of Medicine: Donald F. Patterson D.V.M., Ph.D.
- Lawrence Baker Sheppard Professor of Surgery: Charles W. Raker, V.M.D.
- Mark Whittier and Lila Griswold Allam Professorship: William Donawick, D.V.M.
- Elizabeth and William Whitney Clark Professor of Nutrition: David S. Kronfeld, B.V.Sc., M.V.Sc., Ph.D.
- Grace Lansing Lambert Professorship in Cell Biology: Leon Weiss, B.S., M.D.

Bellwether Circulation

Some readers have the impression that *Bellwether* has a restricted circulation within the School and to alumni. Not so! *Bellwether*, which is published quarterly, has a circulation of 12,700 and is

mailed to alumni, legislators, state and federal officials, horse and livestock breeders, dog and cat breeders, and a number of associations devoted to the care and raising of animals.

12,700

China Trip

Dean Robert R. Marshak spent October 23 to November 13, 1982, in the Peoples Republic of China. The invitation for Dean Marshak to visit China was tendered by the Director of the Bureau of Science and Technology, Ministry of Agriculture. More about this in our next issue!

