

MEDICINE

Prevention for Rabies

When a person is bitten by a dog that may be rabid, the bite may be treated with soap solution instead of the painful fuming nitric acid.

► SOAP SOLUTION may substitute for fuming nitric acid as part of the preventive treatment of rabies in the future, if physicians follow the lead of experiments reported by Dr. Howard J. Shaughnessy and Dr. Joseph Zichis, of the Illinois Department of Public Health. (*Journal, American Medical Association, Oct. 30*)

Recommended procedure at present, when a person is bitten by an animal having or suspected of having rabies, is to cauterize the wound as soon as possible with fuming nitric acid. If it is known that the biting animal had rabies, Pasteur treatment is then given, but if there is doubt about the diagnosis of rabies in the animal, the Pasteur treatment may not be given.

The cauterization of the wound with fuming nitric acid is painful, healing afterward is usually slow and there may be severe scarring. For these reasons, the health authorities point out, many physicians hesitate to use the nitric acid.

So they investigated other possible methods of preventive treatment of the bite.

In experimental rabies in guinea pigs, they found, irrigating, or thoroughly washing out, the wound with a 20% solution of soft soap "is just as effective as chemical cauterization with nitric acid, and possibly even more effective."

The wounds healed in about half the time and there was less scarring than when nitric acid was used. Tincture of iodine and sulfanilamide were also tried. The sulfanilamide did not help in preventing rabies and the iodine was not as effective as the nitric acid or the soap solution.

Speed in treating the wound or bite is important, the studies showed. Treatment with either nitric acid or soap solution was only about two-thirds as effective in preventing rabies when applied six hours after the wound or bite as when applied after 30 minutes or even two hours.

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Williams Bay, Wis., the Delphos, Ohio, amateur had spent several evenings in search for comet d'Arrest, lost since 1923. When his search appeared fruitless, Mr. Peltier resumed his regular program of comet seeking on the night of Sept. 18, with fortunate results. Half an hour after he stopped looking for comet d'Arrest he observed a faint, ill-defined object in the constellation of Draco.

Five minutes of watching through his telescope clearly showed the motion of this comet, a new one for Mr. Peltier, although it had been discovered by Diamaca, a Rumanian, some nine days earlier. However, Mr. Peltier's find was extremely important, as he was the first American to see the comet since news of its discovery had been received at Harvard several days earlier. It is possible that he made the only observations of the comet from the Western Hemisphere, for he reports that by Sept. 22 its magnitude had dropped from tenth to thirteenth, making it very difficult to locate.

Mr. Peltier states that the Diamaca comet was somewhat brighter at the center but without any suggestion of nucleus or tail.

Mr. Peltier's observations confirmed the path of the comet as indicated by the original discoverer, although its motion was exceedingly rapid. This, and the rapid fading of its light, explain why the comet proved so elusive. However, European astronomers observed it well enough for an orbit to be computed. From this it appears that the comet is already on its way out into the depths of space, having passed nearest to the sun on Aug. 21.

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ASTRONOMY

Lost Comet Found

Comet d'Arrest, missing since 1923, is found far south of the celestial equator. It is too faint to be visible without a telescope.

► A COMET lost for the past 20 years has been found by Dr. George Van Biesbroeck, Yerkes Observatory astronomer observing at McDonald Observatory in southwestern Texas. It is comet d'Arrest, not seen since 1923, which inadvertently helped amateur astronomer Leslie C. Peltier of Delphos, Ohio, find comet Diamaca last month. Dr. Van Biesbroeck himself had asked Mr. Peltier to look for comet d'Arrest, and it was just after giving this up as a hopeless task that Mr. Peltier picked up the Diamaca comet. (*See SNL, Sept. 25*)

In a wire to Harvard College Observatory, Dr. Van Biesbroeck gives the magnitude of comet d'Arrest as twelfth, making it too faint to be visible with-

out telescopic aid, hence of interest only to professional astronomers.

Its position, when located, was so far south of the celestial equator that Mr. Peltier's inability to find it is not surprising. From McDonald Observatory, however, the comet appeared much higher in the southern sky, a fact which must have facilitated Dr. Van Biesbroeck's re-discovery.

Inasmuch as the orbit of comet d'Arrest had long since been predicted, astronomers knew fairly well where to look for it, but it appears to have passed close to the sun about two days ahead of schedule.

At the request of Dr. Van Biesbroeck, comet expert of Yerkes Observatory,

ORDNANCE

Rocket Jets to Give Bomb Greater Velocity Patented

► TO GIVE greater downward velocity to a bomb than it can ever gain from the pull of gravity, W. F. Rouse, of Havelock, Iowa, proposes a series of rocket jets in its tail, to be ignited by the spin of a propeller-like safety device after the missile has fallen well clear of the launching aircraft. "Upside down" rocket bombs of this general type were reported in use by the Germans some time ago, but this is the first emergence of such a weapon as an American invention. Patent 2,332,670 has been issued to Mr. Rouse.

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