mentary lipemia by increasing the glycogen content of the liver is yet to be proven.

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The Support Reaction in Spinal Animals.

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Rademaker observed what he called the "Stütz" reaction in decerebellate dogs. Pressure against the pads of the toes, simulating that exerted by the floor against the foot, causes contraction of the muscles of the entire leg in such a way as to convert it into a prop or Stütz. This reflex is a very important factor in reflex standing. Since its discovery by Rademaker,[1] it has been described in detail by Schoen[2] and Pritchard.[3]

Pressure against the pads of the foot stimulates the nerve endings in the skin (exteroceptive) and by stretching the muscles which flex the toes and extend the ankle it also stimulates the nerve endings in these muscles (proprioceptive). Both of these types of stimuli take part in producing the reflex. According to Schoen it occurs after section of all of the nerves to the skin of the foot and must then be purely proprioceptive. In decerebellate animals it can be evoked by touching the pads of the toes, which shows that it can be elicited by tactile stimuli acting alone.

It is most easily studied in animals in which all of the brain in front of the thalamus has been removed. Schoen was unable to demonstrate it in spinal animals except that there was some indication of its presence in decapitate animals when the neck reflex was exerting an influence favorable to extensor tonus.

We have observed the support reaction in decapitate dogs, decapitate cats, and in both acute and chronic low spinal cats. In acute experiments with decapitate and low spinal preparations the reflex can best be demonstrated when reinforced by extraneous stimuli. Pinching the tip of the tail will often furnish the required reinforcement. We have studied the animals when supported in a hammock with the legs hanging pendant through 4 openings in the support.

[1] Rademaker, G. G. J., *Dtsch. Z. f. Nervenheilk.*, 1926, xciv, 144.

[2] Schoen, R., *Pflüger's Arch. f. d. ges. Physiol.*, 1926, ccxiv, 21 and 48.

[3] Pritchard, E. A., Blake, *Pflüger's Arch. f. d. ges. Physiol.*, 1926, ccxiv, 148.

When supported in this way, a decapitate dog resembles a decerebrate dog. The Stütz-tonus is so strong that the hind quarters of the animal can be lifted off the hammock by pressure against the pads of the hind feet, and the legs will bear the body weight for a minute or more. We believe that the pressure of the hammock upon the skin of the abdomen and groin reinforces the support reaction in the hind legs. If the animal is placed upon its back the rigidity disappears. This reinforcement seems to be sufficient in the dog. In the decapitate cat, additional reinforcement from pinching the tail is required; but when reinforced in this way, the support reaction becomes strong and steady and enables the hind legs to carry the body weight for minutes at a time.

In chronic spinal cats with transections at various levels from the third lumbar to the fourth thoracic segments the support reaction becomes within a few days after the operation sufficiently strong to enable the animal to stand. The hind legs bear the weight of the posterior half of the body when the animal is out of the hammock and standing on a table. In our experiments, the length of time which the hind legs of chronic spinal cats have been able to bear the body weight in the standing posture has varied from 30 seconds to 3 minutes and 20 seconds. Standing of a similar sort was seen by Sherrington[4] in chronic spinal dogs.

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Production of Lenticular Opacities by Ultraviolet Radiation in the Presence of Certain Salts.

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The results of Hess[1] were confirmed by the production of a surface destruction of the lens epithelium following exposure of the eyes of frogs to ultraviolet radiation. Burge[2] showed that lens material in a test tube was more readily coagulated if salts or sugar were present, because the lens protein was so modified that radiations of short wave-length could precipitate it. He was also able to produce cataracts in the eyes of fish which had been kept in salt

[4] Sherrington, C. S., *J. Physiol.*, 1910, xl, 28.

[1] Hess, C., *Arch. f. Augenheilk*, 1907, lvii, 185.

[2] Burge, W. E., *Am. J. Physiol.*, 1914, xxxvi, 21.