129 (1061)

On sub-muscular skin transplantations. (Preliminary note.)

By HARRY CARSON COE. (By invitation.)

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Skin transplantations on smaller laboratory animals are usually unsuccessful due to difficulties of bandaging and immobilization. As a preliminary to certain immunity studies an operation has been devised to avoid these difficulties, the animals' own tissues being used as a means of immobilization and surgical dressing.

On guinea-pigs, for example, an incision is made in the mid-dorsal line and the skin and superficial muscles resected. The skin graft is placed in the sub-muscular pocket thus formed and fastened to the periostium of the ribs with silk sutures. The resected tissues are drawn up over the graft and the dorsal incision permanently closed.

About a week later, the superficial tissues are resected over the graft, and the edges of the resection wound sewed to the graft with silk sutures. The exposed graft is protected for a week or two with a light dressing of silver foil and cotton.

The results of the operation are good, so far as the initial union of tissues is concerned.

130 (1062)

On the reaction of the anaphylactic uterus in situ. (Preliminary note.)

By WILLIAM H. MOORE and YOSHIO KUSAMA. (By invitation.)

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Strips of the anaphylactic guinea-pig uterus contract strongly when tested with the foreign proteid toward which the guinea-pig is sensitive. Our attempts thus far to record similar contractions by applying the proteid to the uterus *in situ* have been unsuccessful.

From this it would seem that the reaction of the anaphylactic uterus while still supplied with normal nerve and blood elements is different from its reaction when isolated from the rest of the body.

131 (1063)

Effect of lead salts and of the nitrites upon the movements of the intestines.

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Riegel (1875) and J. Pal (Die Gefässkrisen, 1906) suggested the use of amylnitrite for the control of pain in lead colic and in the gastric crises of tabes dorsalis, believing that the fall of blood pressure sufficed to bring about diminution in these symptoms.

The present series of experiments was undertaken in order to determine whether the nitrites might not act by causing relaxation of a spastic condition of the intestinal walls. The experiments were carried out on rabbits whose intestinal movements were observed through a large window in the abdominal wall, which was closed from the outside air by inserting a crystallizing dish 10 cm. in diameter. The sides of the crystallizing dish were coated with thick beeswax and the window was held in place by fixing the abdominal walls around it with a purse string suture. The animals were lightly anæsthetized with ether.

Injection of 5 mg. lead acetate per kg. immediately caused the onset of intense peristaltic movements which seemed to be due to stimulation of the preganglionic synapse, since they were abolished by injection of nicotin or by painting nicotin upon the intestine, but were not affected by extirpation of the spinal cord and section of the vagi. As was suspected from the clinical results reported by Riegal and Pal, this peristalsis could be inhibited by inhalation of amylnitrite, by placing two drops of nitroglycerin upon the tongue or by the injection of 80-100 mg. per kg. sodium nitrite. The effects of the two former drugs were most marked, though the effects of the latter were more prolonged.