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The parathyroid gland, with demonstrations of the effects of hypodermic injections of parathyroid nucleoproteid after parathyroidectomy.

By **S. P. BEEBE.**

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It has been found that the symptoms of tetany following parathyroidectomy in dogs can be inhibited by the hypodermic injection of parathyroid nucleoproteid. The globulin from these glands has not been found effective. If the nucleoproteid is heated to boiling in an alkaline medium its inhibitive powers are destroyed.

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Further experimental and clinical observations on the transfusion of blood.

By **GEORGE W. CRILE.**

[*From the Laboratory of Surgical Physiology, Western Reserve University Medical College.*]

The therapeutic results may be grouped into three classes: positive, negative and undetermined. Among the positive results is transfusion in acute hemorrhage which is apparently final. In pathologic hemorrhage it has proven positive in improving the patient's immediate condition, and in most instances wholly controlled the hemorrhage itself. In shock its value seems far greater than any other remedy hitherto employed by me. From the experimental standpoint it seems to be the most effective treatment of illuminating gas poisoning.

Among the negative results are transfusion in pernicious anemia, leukemia, carcinoma, strychnin poisoning and diphtheria toxemia.

Among the undetermined results may be mentioned chronic suppuration with its attendant debility and anemia, tuberculosis and the acute self-limited diseases.

Of the twenty one clinical cases, all were technically successful.

In every instance the donee experienced a heightened vitality, and in the absence of serious organic disease the patient became buoyant, even jocose. Some had chills during transfusion or soon after, and a majority showed some febrile reaction later.

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A preliminary report on the direct transfusion of blood in animals given excessive doses of diphtheria toxins.

By **GEORGE W. CRILE** and **D. H. DOLLEY.**

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Technique.—The dog was given *subcutaneously* the dose noted. After waiting a certain time an anastomosis was made between one of his vessels (usually, for convenience, the external jugular) and an artery (carotid) of a donor, of equal or usually larger size. When this was perfect, the toxic dog was bled, usually from a femoral artery, as rapidly as possible, to complete exsanguination, and the transfusion was in no case started till cessation of respiration gave warning of the limit's being reached. When this occurred the blood was allowed to flow, under control, until the pulse returned in every case to a better quantity than before. The time taken in transfusing was usually about 15 minutes. (The venous anastomosis was made because more blood went into the donee by it.)

Weight of the donee.[1] kg.	Dose.[2] c.c.	Time of bleeding after dosage. hrs.	Result.[3]
3.13	0.025	24	Died in 84 hours.
4.8	0.025	20	Died in 120 hours.
2.8	0.015	17½	Died in 120 hours.
7.3	0.015	3	Died in 84 hours.
4.5	0.015	1½	Died in 10 days.

[1] Not essential as the donee bled completely and the transfused amount could only be estimated.

[2] The toxin used was a fresh supply (1906). It was not so definite in its effect as regards time as the first. Four control dogs, with 0.015 c.c. each, died in 3, 5, 7 and 8 days respectively; one with 0.02 c.c. died in 3 days and one with 0.025 c.c., in 2 days.

[3] Autopsies were performed on all these dogs, in which the findings were the same as in the controls, *i. e.*, varying degrees of hemorrhagic enteritis, focal hemorrhages in the kidneys and marked cloudy swelling of the liver and kidney, with jaundice. In some, focal necroses of liver and kidney were apparently present. The microscopic part has not yet been worked up.