

3. Chronic Suppuration. For the double purpose of lessening the secondary anæmia and possibly of supplying better fighting leucocytes in extreme cases of prolonged intractable suppuration, transfusion was done. There was distinct improvement in the venality and general well-being. The improved blood picture did not continue. Neither was there any noticeable improvement in the local suppurative field. Some of the patients, however, gained markedly in weight and in strength and in every case it was demonstrated that the patient could be raised to a higher state of vitality for better enduring surgical measures.

4. Tuberculosis. In a case of intractable tubercular pleuritis and peritonitis transfusion was made. Although the patient gained considerably in weight and strength, the last observation showed that while the disease is not progressing and the general nutrition is still improving, the disease has certainly not yet been cured.

5. The Transference of Immune or Protective Bodies. The recent advances in the investigation of immunity seem to warrant the hope that in certain self-limited diseases immune bodies might be transferred. With this in view as well as the protection of the donor, in a case of grave typhoid hæmorrhage I selected a subject who had had typhoid. The donor was young, florid, muscular and weighed 225 pounds—a splendid subject. The recipient was literally flooded with blood and was brought out of clammy unconsciousness into a state of glowing jocoseness. The hæmorrhage, however, recurred on the second day, and the patient died without offering the opportunity of noting the role of the hypothetically transferred immune bodies. In another such case I would advise immediate laparotomy after transfusion, to try to secure by a cobbler's stitch the bleeding ulcers.

6. Malignant Tumors. Based on the original observations of Gaylord and Clowes, that certain animals have a natural immunity to carcinoma and others may acquire such immunity, as well as the further observation that hæmorrhage is followed by a more rapid growth of either carcinoma or sarcoma, I have transfused a series of carcinomata that were inoperable. I was further encouraged by the result of transfusion in collaboration with Dr. Beebe of New York, who has found an inoculable sarcoma which has been planted in a very large series of animals for various experimental purposes. Among these animals certain ones acquired an immunity and certain ones showed a natural immunity. We have seen large sarcomata in several dogs regress, and in at least one instance entirely disappear after bleeding followed by transfusion from immune dogs. Though all these various considerations leave us far from a practical method of treating malignant diseases, yet I have felt that when confronted with an apparently incurable carcinoma or sarcoma I