

cells 5,100, and platelets 134,000. No more transfusions had been given. There was no renal disease, but liver function was impaired. The BSP (bromsulphalein) was 35% and the prothrombin time remained elevated 2 to 5 seconds over the control, despite parenteral vitamin K therapy. Other medicaments during the period included procaine penicillin, tetracycline, and propantheline bromide. His blood was essentially normal when he was transferred one month later to a psychiatric institution for custodial care.

*Case 4.*—A 48-year-old mildly diabetic Negro male was admitted for therapy of aseptic necrosis of the right femoral head resulting from a traumatic posterior dislocation 20 years before. He had cirrhosis of the liver (BSP 33%). Following an arthrodesis, he developed wound abscesses and chronic osteomyelitis. He was treated with procaine penicillin, streptomycin, and novobiocin with only temporary benefit. Chloramphenicol was given, 2 gm. (29mg/kg.) daily in 3 courses for 36, 69 and 7 days. Ten days later he was placed on 3 gm. (44 mg/kg.) daily for a total of 76 more days. At the end of this last period he complained of blurred vision, and the hematocrit reading was found to be 16.5 vol.%. No reticulocytes were found in the peripheral blood. White blood cell count was 7,800 and platelets 192,000. The bone marrow was cellular, but there was a decrease in red cell precursors, and the primitive rubriblasts contained vacuoles. The drug therapy was stopped and he was given 300 ml. of packed red cells. The reticulocyte count reached a peak of 8.7% 9 days after the drug was stopped. The hematocrit gradually returned to 40 four weeks later. The patient's visual disturbance disappeared. He had received iproniazid for 6 months prior to the episode of marrow depression but no other drugs for 5 months. Six weeks later he was again given 2 gm. of chloramphenicol daily for 18 days, and his hematocrit reading fell from 42 to 32 vol.%. However, during this period he had further surgery and a depressant effect of this trauma on erythropoiesis must be considered.

*Case 5.*—A 24-year-old paraplegic Negro male was admitted by transfer from another hospital 2 months after an auto accident in which he had suffered a fracture-dislocation of his neck. During the next 8 months he received 3 courses of chloramphenicol orally for a troublesome bladder infection. Two grams (39/kg.) were given daily for 72 days; 2 gm. daily for 16 days; and 4 gm. (77 mg/kg.) daily for 10 days. He also received sulfasoxazole and tetracycline for the same purpose. Other drugs included meprobamate, zoxazolamine, diphenylhydantoin, phenobarbital, nitrofurantoin, and tripeleminamine for varying periods of time. Ten months after admission, 2 gm. of chloramphenicol were administered intramuscularly daily. After 21 days the dose was increased to 4 gm. daily orally and this was continued for an additional 19 days. At the end of this period the hematocrit reading was 21 vol.%, reticulocytes were 0.0% and the platelet count was 18,000. The white blood cells appeared normal on a peripheral smear, although the laboratory reported a count of 4,150. The bone marrow aspirate was cellular, but there were very few red blood cell precursors, and the primitive rubriblasts contained vacuoles. Megakaryocytes appeared adequate despite the thrombopenia. He was given 1,500 ml. of whole blood, and chloramphenicol therapy was stopped. Five days later reticulocytes were 0.1%, but 11 days after administration of the last chloramphenicol they had risen to 0.5%, and to 1.3% after 7 more days. The urinary tract infection was controlled with streptomycin, sulfasoxazole, and later vancomycin and tetracycline. Nitrofurantoin and methenamine mandelate (Mandelamine) were also given. Fourteen months after the acute episode of marrow suppression, chloramphenicol was again administered in several 6-10 day courses of 2 gm. daily. For this period very little laboratory data are available. However, during the last such course, the hematocrit reading fell from 35.5 to 27 vol.%, then spontaneously rose to 41.5 two months after the last dose of the drug. Despite the frequent urinary tract infections, his blood-urea-nitrogen level remained normal. Liver function as measured by the BSP, prothrombin time, and serum albumin and globulin was also normal.

*Case 6.*—A 38-year-old chronic alcoholic Negro female was admitted because of abdominal pain, nausea, and vomiting. She had tuberculosis, and had had a thoracoplasty in 1950. She had received no chemotherapy for 5 months, and there was no evidence for activity of the tuberculosis at this time. Chloramphenicol was given prophylactically for presumptive pancreatitis, 3 gm. (90 mg/kg.) daily