to 5.4 mm. Other alkali earth chlorides showed similar action. Heavy metal salts, short of the concentrations that cause precipitation, are still more effective as depressants.

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Hemolysis in eclampsia.

By **JAMES EWING.**

[*From the Department of Pathology, Cornell University Medical College, New York City.*]

There are several reasons suggesting that a hemolytic agent of placental origin may be of essential importance in eclampsia. The occurrence of methemoglobinuria, the possible relation of the hepatic thromboses to hemolyzed red cells, the resemblance between the eclamptic lesions and those produced by the injection of eclamptic serum or of immune hemolytic serum in rabbits, the possible origin of the eclamptic toxin from the placenta which normally possesses a hemolytic ferment, the marked hypertrophy and desquamation of the syncytium at term and during labor, and the relief of the symptoms in many cases as soon as the placenta is removed, all tend to indicate a hemolytic agent derived from the placenta as a factor in the disease.

In order to obtain some information regarding this subject I examined the placenta in fifteen cases of eclampsia, and the circulating blood and the viscera of several fatal cases for evidence of hemolysis. If any marked degree of hemolysis had occurred during life one would expect to find evidences of it in fresh emulsions of placental blood made shortly after delivery. Spreads of the blood on glass slides were also examined for evidence of agglutination and hemolysis, and sections of the placenta hardened in Orth's fluid were examined. Several normal placentas were first tested, and in these no evidences of hemolysis appeared immediately or after three to fifteen hours in the thermostat. In spreads and sections of normal cases the red cells often appeared moderately clumped without being fused. In only one of the eclamptic placentas was evidence of hemolysis secured, and this occurred in a fatal case in which, also, similar evidence was found in the uterine, portal and hepatic veins. The urine was bloody.

This patient had received a large salt infusion during the convulsive period. In two other fatal cases hemolysis was found only in emulsions made from the spleen, but not in the hepatic, portal, or uterine veins, or in the placenta. In a fourth fatal case with bloody urine and extensive hemorrhages in the brain, liver, and peritoneal cavity, 300 c.c. of blood were drawn from the arm during life. The serum was entirely unstained by hemoglobin.

The blood of the placenta mixed with fetal blood, or with extracts in salt solution of liver and kidney, failed to hemolyze.

The observations indicate that the eclamptic toxin is not a hemolytic agent derived from the placenta, and that hemolysis is not necessarily associated with the lesions of the viscera. Semb's observations in which he demonstrates visceral lesions strongly resembling those of a hemolytic serum, cannot be accepted as evidence of a specific eclamptic toxin. Histological study of the liver of eclampsia indicates that the characteristic lesions consist in fibrin thrombi and not in agglutination and hemolysis of red cells, and that when hemolysis occurs it results from the products of degeneration and necrosis of endothelial and hepatic cells. It is therefore probably an entirely secondary factor in the disease.

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Glycocoll nitrogen in the metabolism of the dog.

By **J. R. MURLIN.**

[*From the Physiological Laboratory of the New York University and Bellevue Hospital Medical College.*]

While attempting to explain the behavior of gelatin in metabolism it occurred to the writer that much significance might be attributed to its high content of glycocoll. It is well known that the nitrogen of gelatin is not ordinarily retained in the body but appears quantitatively in the urine, chiefly as urea. But when fed with meat and abundance of carbohydrate it is possible to establish nitrogen equilibrium near the fasting level, if two-thirds of the total quantity of nitrogen fed is present in proteid-free gelatin and only one-third present in the meat.[1] Would glycocoll, if fed in the same way, behave as does gelatin?

[1] Murlin: This journal, 1905, ii, p. 38.