

uræmia—puerperal eclampsia. Efforts have been made to connect this state with the formation of toxic products formed by the chemical activities of the living cells of the embryo, with the absorption of toxic material formed in the intestine and with the accumulation of urea in the blood as the result of nephritis or of pressure on the renal vessels, but the efficacy of these supposed agencies still remains unproved.

My personal experience with puerperal eclampsia is limited to the study of the blood of six victims of this state.¹ In at least three of these cases the urea of the blood was not increased in percentage. It seems highly probable that the toxicity of the blood was distinctly increased in at least two of these cases. Of the other cases it cannot be positively stated that the blood was more toxic to animals than is ever the case with the blood of non-eclamptic puerperal women, nor, on the other hand, can it be stated that the blood was not more toxic than normal.

At the present time there is a controversy as to the toxicity of the blood of eclamptic women, which can be definitely settled only by numerous and very carefully conducted observations. Although there is thus considerable uncertainty as to whether an increased toxicity of the blood is an essential feature of puerperal eclampsia there is important indirect evidence of the existence of such a toxæmia. This consists in the presence of anæmic and hemorrhagic areas of necrosis in the livers of women dying of eclampsia.²

Schmorl, who first described these striking lesions, regards the thromboses of the capillaries and small periportal veins with which they are associated as dependent on the passage into the blood of placental elements and products of placental degeneration.

Flexner has succeeded in producing similar alterations in the liver by means of experimental intoxications, and there can be little doubt that we must regard the necrotic changes in the organs of eclamptic women as dependent on a toxæmia. How this toxæmia arises and how it is related to the toxæmias of nephritis already discussed remains to be discovered.

Although this sketch of the pathology of uræmic conditions, made from a somewhat personal standpoint, shows us to be in possession of a meagre fund of knowledge respecting the pathological basis of uræmia, we may confidently hope for further enlightenment from experimental pathology. It seems to me that future researches should have refer-

¹ The blood from these patients was obtained through the courtesy of the attending physicians of the Lying-in Hospital of New York.

² I have never met with these lesions in the livers of persons dying from other forms of uræmia than puerperal eclampsia.