hypnotic barbiturates closer to the "general anesthetic" level were necessary. The suppression of convulsions required in individual animals total doses in mg. per kg. as follows: Na nembutal 4, 14, Na amytal 15, Na phenobarbital, 30, (32 days), 60, pernocton 40 (25 days), 40 (16 days), Na barbital, 150; for comparison, chloral hydrate, 220, of which 30 subcutaneously (31 days). The periods given indicate a survival to time of report; the other animals died in 2 to 11 days, possibly due to incomplete asepsis.

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Use of the New Born Mouse in the Study of Kidney Function.

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A search of the literature has not revealed any satisfactory method of studying, by direct observation, the passage of dye through the mammalian kidney. The principal difficulties seem to be that the capacity and density of the kidney are so great that it has been impossible to see any appreciable distance into the kidney. The kidney of the new born white mouse is small and relatively transparent and appears to be a favorable subject for use in the study of kidney function. With proper illumination it is possible to see the various functional units in the living kidney.

The mice used in this work were from 2 to 24 hours old. They were injected subcutaneously, in the back, with a small amount (0.1 cc.) of some vital dye, such as 0.5% Indigo Carmine and immediately placed in a warmed cotton lined box. If the mouse is left undisturbed the dye appears in the urine in about 20 minutes.

Fifteen minutes after the injection the mouse is quickly etherized and a dissection made exposing one of the kidneys. The mouse is then placed in a special warm stage heated to 37°-38° C. and the kidney is kept moist with warmed Ringer's solution.

With a binocular dissecting microscope it is possible to distinguish if the injection is successful, the glomeruli and the presence of the dye along the tubules from the capsule to the pelvis.

In the same preparation it is possible to make a very pretty demonstration of peristalsis in the ureters. Clumps of dye can be seen passing down the lumen of the ureter propelled by its peristaltic movements.