

ments revealed that the extirpation of the prostate exerted no influence either on the behavior or the rate of learning of the animals. Fuller data to appear in the *Journal of Urology*.

48 (1630)

**A substance toxic to guinea pigs in the blood of infants with  
"intestinal intoxication."**

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Cases of so-called "intestinal intoxication" can be divided into two groups. In the first group there is a history of preceding nutritional disturbance with diarrhea of days or weeks duration. The onset of toxic symptoms is often gradual. The infants are greatly wasted and the tissues show signs of water loss. The blood concentration may be slightly increased but is often normal. The mental state is best described as somnolent. Pronounced nervous symptoms are absent.

In the second group the onset is usually sudden and preceding nutritional disturbances are slight or may not occur at all. Wasting is slight. Diarrhea is usually not severe and in many cases does not occur. One of the striking features of this group is the presence of pronounced nervous symptoms. Convulsions are common and the patient is in deep coma with marked involuntary movements and muscular twitchings. The blood of these infants is much concentrated. The clinical picture, the complete anuria and the high non-protein nitrogen of the blood in these cases strongly suggest a relationship to uremia. The work of Foster on uremia suggested the possibility that the blood of infants with this severe type of intoxication might show the presence of a toxic substance.

8 to 15 c.c. of blood serum or citrated plasma were dialyzed through collodion against from 50 to 100 c.c. of water for 12 to 24 hours. The dialysate was rapidly concentrated in a current of air at a temperature below 40° to a volume of 3 to 5 c.c. and injected into the peritoneal cavity of guinea pigs.

There were 13 experiments. In 6 animals there were no symptoms of consequence. Seven of the animals showed distinct symptoms. Two died within two hours. Three of the remainder showed pronounced symptoms. Two of these died in four to five hours respectively, the third recovered in twelve hours. One animal showed very slight symptoms but died in twelve hours. One showed moderate symptoms, but recovered completely in two hours.

The symptoms presented by the animals were great uneasiness, scratching of the nose, bucking movements, paralysis and pronounced dyspnea. There was usually a fall of temperature of 5 to 7 degrees F. Autopsy of the 4 animals which died within 5 hours showed great distension of the lungs and peritoneal and pericardial hemorrhages. No pathological changes were apparent in the animal which died in 12 hours.

Two series of control were done. (1) The blood of 17 practically normal infants was treated as outlined and injected into guinea pigs. None of the animals developed symptoms. (2) The blood of 13 infants suffering from acute infections was tested. Six had pneumonia, 3 tonsillitis and 4 infectious colds with otitis media. The results were negative. Three of the infants with pneumonia had diarrhea.

These experiments seem to indicate that the blood of infants with a type of intestinal intoxication may show the presence of a substance toxic to guinea pigs. No evidence is available at present to indicate the nature of this substance or its relation to the disease.

49 (1631)

**General effects of increased and decreased pressures of oxygen  
on dove embryos.**

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Compared with hatched young or adults the dove embryo has very inferior powers of adjustment to either high or low oxygen