

constriction of the auriculo-ventricular ring caused a cessation of all heart sounds. Dock stated that constriction of the auriculo-ventricular ring invariably caused complete cessation of the heart sounds. Our results, therefore, were only in partial agreement with his.

During the onset of ventricular systole it would seem that, sudden change of intraventricular pressure would tense all structures subjected to the pressure. In the vigorously contracting myocardium this tensing is such as to produce audible sounds in the absence of motion of the ordinarily movable valve structures.

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Anesthetized Kittens Used to Test for Staphylococcus Enterotoxin.

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The reaction of kittens to staphylococcal enterotoxin was described by Dolman, Wilson and Cockcroft,¹ and confirmed by Kupchik² and Minett.³ It was shown that kittens will vomit after intraperitoneal injection of heated staphylococcal filtrates that contain enterotoxin.

We find that this test can be rendered more objective and more convenient by anesthetizing the kittens with sodium pentobarbital. The kittens are given a small meal; after 30 minutes they are injected intraperitoneally with sodium pentobarbital. The dosage is 30 mg per kg body weight, as a 5% aqueous solution. This produces light anesthesia, which lasts for several hours. The heated staphylococcal filtrates are injected intraperitoneally after the onset of anesthesia; then the kittens are laid out in a row and observed for vomiting. Only definite vomiting with expulsion of vomitus, between 20 and 90 minutes after injection of the filtrate is considered as positive.

The kittens should be kept warm, and turned over every hour to avoid hypostatic congestion. It is easy to handle a large number of kittens in this manner. Sensitivity is somewhat reduced, but specificity may be increased since the effects of excitement are avoided. It is important to have shallow anesthesia, and to use 50% larger doses of filtrates than when working with conscious kittens.

¹ Dolman, Wilson and Cockcroft, *Canad. Pub. Health J.*, 1936, **27**, 489.

² Kupchik, *J. Infect. Dis.*, 1937, **61**, 320.

³ Minett, *J. Hyg.*, 1938, **38**, 623.