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The abolition of visceral pain by intramuscular injection of cocaine. — A demonstration.

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The chief purpose of the demonstration was to bring out a new point with regard to the effects of cocaine. But we wish to utilize the experiment also in settlement of an old and frequently discussed point, namely, the question of the sensation of pain in abdominal viscera. According to the latest review of that subject in Nagel's Handbook of Physiology, the majority of the writers are inclined to deny the existence of such sensations.

On this dog laparotomy was performed under ether anesthesia and one intestinal coil was loosely fixed between the branches of a long clamp; the abdomen was again closed by sutures with the exception of a small opening for the body of the clamp. Compression of the protruding handles of the clamp meant pressure upon the coil. At the time of demonstration the animal was not entirely out of the anesthesia; nevertheless even a moderate compression of the handles sufficed to bring out an unmistakable reaction. Simple traction had apparently no effect and rubbing the clamp within the wound or rubbing the inner point of the clamp against the parietal peritoneum had only a slight effect.

This experiment demonstrates then beyond a doubt that the *intestines of dogs are not devoid of the sensation of pain.*

An injection of 0.02 gm. of cocaine was then made into the pectoral muscle. Five minutes later the handles of the clamp could be compressed or moved in any other manner without bringing out any reaction, while the animal had his eyes wide open. This shows clearly that *cocaine can produce not only local anesthesia but also a distant anesthetic effect through the circulation.*