

PERILOUS PATRIOTISM.

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JOSÉ ABRIL, aged twenty-two years, a Mexican "ranchero," while celebrating a national holiday, picked up two sticks of giant powder, one in each hand.

The fuse was burning rapidly, and before he could throw them away they exploded in his hands, literally blowing them off and entirely destroying both eyes. His face, neck and chest were badly burned, and there was a compound fracture of the superior maxillary.

He presented one of the most pathetic pictures a surgeon could be called upon to deal with, and his own relatives could not recognize him. He was brought into the Nacozari (Mexico) hospital at 4 A.M., just ten hours after the accident had occurred, he having to travel six miles in a wagon.

His pulse was 130 and very weak. Temperature was sub-normal. Respiration 28. Stimulants, heat, etc., were at once administered. Professor Whitmoyer etherized and the nurse assisted me.

We amputated both arms in the lower third, removed numerous small bones from the superior maxillary and did an evisceration of the right eye. Many small rocks and pieces of copper caps were removed from the face, neck and chest. The operation lasted forty minutes, and the patient looked as though he would never regain consciousness, but after two hours with the administration of stimulants he was able to talk.

He remained in the hospital three weeks, making a good recovery. He has a wife and two children.

His unbounded patriotism for the Mexican flag, in endeavoring to preserve it from being blown to pieces, caused him to lose his hands and eyesight.

Medical Progress.

REPORT ON PROGRESS OF SURGERY.

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(Continued from No. 18, p. 498.)

AN EXPERIMENTAL AND HISTOLOGICAL STUDY OF CARGILE MEMBRANE.

A. B. CRAIG:⁷ This article is divided into a study of the efficacy of the membrane in preventing adhesions in the abdominal and cranial cavities and around nerves and tendons, and the ultimate fate of the membrane in the tissues. Many experiments have been done, and the conclusions drawn from these experiments are as follows:

1. The most distant time at which we found unchromicized Cargile membrane existing intact, macroscopically, within the peritoneal cavity, was the fourteenth day; in most instances it had disappeared to macroscopic view much sooner. The earliest time at which we found the mem-

brane had disappeared over the area of actual denudation was on the third day.

2. Unchromicized Cargile membrane when buried in living animal tissue, as when placed around tendons and nerves, or in muscle, is apparently absorbed sooner than when placed within the peritoneal cavity. In no instance was so much as a fragment of the membrane observed macroscopically so late as the fifth day, though in the fragmental state membrane was noted microscopically so late as the fourteenth day.

3. Chromicized Cargile membrane, when placed within the peritoneal cavity or when buried in living animal tissue, remains unabsorbed much longer than does the unchromicized variety. The two varieties doubtless bear relatively the same relation to each other, so far as absorbability is concerned, as do chromicized and unchromicized catgut.

4. While the unchromicized, and to a less extent the chromicized, variety will adhere fairly firmly to a surface denuded of peritoneum when such surface is relatively dry, yet neither can be depended upon to remain where placed, unless anchored by some method, in a situation which is subject to peristaltic activity.

5. A logical deduction from the results of the foregoing experiments seems to warrant the belief that neither variety of the membrane is of value in preventing adhesions within the peritoneal cavity. In every instance the membrane, until absorbed, appeared to act as a foreign body, and therefore as an irritant.

6. We believe from the results of our observations that both varieties of the membrane are of value in preventing adhesions to wounded nerves and tendons when such structures lie in tissues which have been subjected to trauma, operative or otherwise. Our conviction is that for this purpose the chromicized is the more valuable.

7. We believe that several layers of either variety of the membrane when placed around tendons or nerves afford a safer and better protection than one layer.

8. We believe that, when used in the cranial cavity to replace destroyed or removed dura, the unchromicized variety would be exceedingly difficult to handle on account of its being unmanageable when moist, and we further believe, on account of the rapidity with which it dissolves, that it would be of no special value in this situation even though it could be used with ease. Owing to the facility with which the chromicized variety can be handled, its greater toughness and increased power to resist absorption, we believe that it would prove of greater value in replacing the dura.

9. Our studies indicate that the membrane is destroyed by a lytic substance, or substances, contained in the body fluid. The celloidin capsule experiments, even though bacteria were present in one, show that the membrane is softened, and at least partially absorbed by body fluids without the presence of cells. In the tissues it is split into fibrils, this change being accompanied or followed by the penetration of

⁷ *Annals of Surgery*, June, 1905, p. 301.