I made a vertical incision through the peritoneal and muscular coats of the duodenum between the ulcer and the pyloric vein, so called. This wound I stripped back from the underlying mucous coat, and then dissected loose posteriorly the exposed cylinder of mucous membrane, which was easily cleared for about an inch. The mucous membrane was then doubly ligated near the center, with just space enough between the two ligatures to allow for cutting through with knife or scissors. The mucous membrane was divided between the ligatures and a purse-string of catgut run around the base of each stump in the angle where it joined the other coats of the intestine. This suture was placed rather in the muscular coat than in the mucous membrane itself. The stumps were then umbilicated and the purse-strings tightened and tied, just as is done in disposing of the stump of the appendix. The serous-muscular wound was closed with two rows of sutures, the peritoneal coat being turned in against the muscle of the posterior wall of the duodenum.

While handling the stumps one of the ligatures slipped off. The mucous membrane was seized with forceps and inverted without further effort at ligation. I am rather inclined to think that this would be the preferable routine method, except for possible hemorrhage from the cut edge of the mucous membrane, and this could certainly be controlled by proper care in placing the purse-string sutures.

I am sure that this idea is a good one and simplifies closure of the pylorus very considerably. It can be carried out without dividing the omentum, as there is no necessity for mobilizing the pylorus. It produces such a long gap, free of mucous membrane, that the continuity of the lumen of the bowel is not likely ever to be reestablished.

A longitudinal incision may be used in the serous-muscular coat instead of the vertical incision which I employed, and would have some advantages, but would cause more hemorrhage.

Ligation of the exposed cylinder of mucous membrane at both ends with removal of intervening section, followed by careful closure with inversion of the serous-muscular structures so as to obliterate the space left vacant, could be more easily done, and would probably be satisfactory though not so pleasing technically.

The patient made an uneventful recovery.

POISONING BY MERCURIC CHLORID PRESENTING UNUSUAL FEATURES

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The following case seems worthy of record because of the size of the dose of mercuric chlorid, the delay in onset of symptoms, and the prolonged suppression of urine.

J. M., aged 43, a man of splendid physique, walked into the accident ward of the Medico-Chirurgical Hospital and stated that he had taken mercuric chlorid tablets (presumably $7\frac{1}{2}$ grains each) by mistake. According to his statement about an hour and a half previously he had taken five tablets but had felt no evil effects until an hour later, when he began to have some nausea and had vomited on his way to the hospital. He was at once given milk and eggs, the stomach washed out and apomorphin injected hypodermically. He was then put to bed, milk and eggs continued, and enteroclysis employed. As there did not appear to be any absorption of the water from the colon the enteroclysis was discontinued after a few hours and hypodermoclysis substituted. The treatment consisted in the administration of demulcents, 4 ounces of milk every two hours, 4 ounces of water by mouth every two hours, hypodermoclysis ranging from a pint to a quart in twenty-four hours, dry cupping over the loins, hot packs twice a day, and toward the end stimulants and anodynes as indicated.

On the second day the nausea and vomiting disappeared (I believe it was as much due to the apomorphin which had been given, as to the poison) and did not become manifest again until the seventh day. During these five days the

patient made no complaint of pain and did not seem in any way to feel ill. The temperature ranged between 99 and 101 F. from his admission till the eighth day, when it dropped slightly below normal and from then ranged between 97 and 98 until death.

On the sixth day he complained of some pain in swallowing and his stomach rejected some of the water which he drank. On the seventh the pain in swallowing was more marked, the pharynx was found intensely congested and there were one or two small ulcers on the mucous membrane of the mouth. The ulcerations extended in breadth and depth, and on the tenth day a large part of the pharynx was necrotic. On the eleventh day some dulness, with bubbling râles, was noted at the base of the left chest. Despite stimulation the quantity of fluid in the lungs increased and he died of pulmonary edema on the twelfth day.

The most interesting feature in the case, aside from the slowness of the onset, was the almost complete suppression of urine for a period of about a week. The accompanying table shows the daily quantity of urine.

TABLE SHOWING DAILY QUANTITY OF URINE

Day	Quantity, Ounces	Specific Gravity	Amount of Albumin
1.....	$1\frac{1}{2}$	1.020	Large
2.....	$\frac{1}{8}$	?	Large
3.....	none		
4.....	none		Moderate
5.....	$\frac{1}{2}$	?	
6.....	$\frac{3}{8}$	1.012	Small
7.....	1	1.014	Small
8.....	4		
9.....	9	1.014	Small
10.....	11		
11.....	14	1.010	Trace

In a period of 120 hours, therefore, he had secreted less than 2 ounces of urine, despite the fact that he was drinking nearly 2 quarts of liquids and receiving daily nearly another quart hypodermically. There was, however, no evidence of any dropsical accumulation either in the extremities or chest. Some was lost through the bowels although the purging was by no means violent. From the sixth day, the quantity of urine increased daily—despite the fact that the amount of fluid ingested was less because of the difficulty in swallowing which developed about this time—until the day before his death, when he passed 16 ounces.

Holland (Peterson and Haines, Toxicology, 1914, ii, 391) says that after the swallowing of corrosive sublimate "The onset is never delayed half an hour," and I have been unable to find any case in the literature in which symptoms have not appeared promptly. Although we have no definite knowledge in this case of the exact time intervening between the taking of the poison and the onset of symptoms, there was no apparent reason to doubt the statement of the patient. The above quoted remark as to the onset of symptoms in mercuric chlorid poisoning is at least open to question.

It is of interest to note, also, the entire absence of any symptoms suggestive of uremia, either headache, high blood-pressure, urinous odor to the breath or disturbed intellection, despite the fact that the kidneys had practically entirely ceased functioning for nearly a week. Dobsenz (New York Med. Jour., July 26, 1913) reports a case of mercuric chlorid poisoning in which only 10 drops of urine were passed in five days, the patient eventually recovering.

Health and Safety in Metallurgical Plants.—In the metallurgy of iron and steel alone there are more than 150,000 men employed; 30,000 to 35,000 persons are injured and a considerable number are killed each year. In all the branches of the mining industry that are conducted above ground there are 1,300,000 employees, and not less than 100,000 are injured and a considerable number killed each year. In addition, the health conditions in many of the metallurgical plants are bad and the health of a larger number of persons is permanently impaired by the injurious conditions to which they are exposed.—Report of Director, Bureau of Mines, 1914.