Cincinnati, has just informed me that he recently observed a small ring of yellow discoloration at the umbilicus in a patient who was not subjected to an operation and in whom the diagnosis of acute hemorrhagic pancreatitis was made at autopsy. It was not agreed by all concerned that the discoloration was real and his observation was not made a matter of record.

The case which I have reported demonstrates that yellow discoloration at the umbilicus may indicate the presence of acute hemorrhagic pancreatitis. As already described, yellow umbilical discoloration also may be present after rupture of the gall-bladder or common duct. It is evident that umbilical discoloration in acute hemorrhagic pancreatitis can be present only in cases in which many hours have elapsed after the onset of the acute pathologic process.

707 Race Street.

## COCCYGEAL HERNIA

GUSTAV A. PAGENSTECHER, M.D., SAN ANTONIO, TEXAS

Herniation of the abdominal viscera is found in every direction. The usual types of hernia are most frequently due to some congenital malformation or weakness.

Hernias through the pelvic floor are uncommon and are due in the main to mechanical injury after birth. In spite of the fact that the greater part of the hydrostatic pressure of the abdominal viscera is exerted on the pelvic floor, the strong but short pelvic fascia, aided by the sacrum, coccyx, pubic rami, sacrosciatic ligament, sacrotuberous ligament, urogenital ligament, levater ani and gluteus maximus muscles are able to hold the viscera back and prevent them from extruding through its vaginal and anal openings, making a hernia in this region one of the rarest of protrusions.

A woman, aged 50, came to me complaining of a pain in the region of the coccyx which was aggravated by sitting, coughing or straining at stool. This pain had been present since the birth of her only child twenty-seven years before.

Physical examination revealed a loose, tender, freely movable coccyx, which caused excruciating pain on manipulation. Otherwise laboratory and physical observations were negative.

A diagnosis of fracture with coccygodynia was made and I recommended surgical removal. She accepted the advice and the coccyx was removed by another surgeon.

Following this removal the wound failed to heal for about three months, all the while discharging a clear amber colored fluid which, from the description, resembled peritoneal fluid, and a large cavity was packed daily. This cavity gradually became smaller and finally healed.

With this history the patient reported to me a second time, about seven months after the removal of the coccyx, complaining of being unable "to sit down," that she had a "hernia," that she was "sitting on her bowels," and that she had to hold her bowels back when at stool.

The patient weighed 155 pounds (70 kg.). In the region of the sacrum and coccyx was a rounded protruding mass which was freely movable and was easily replaced. Reducing the mass caused pain and discomfort. Coughing or straining brought the mass out. It was covered by a thin layer of healthy skin, was moderately firm, would gurgle when handled, and had all the earmarks of a hernia, about the size of an orange.

The triangular opening through which this hernia came was bounded above by the lower border of the sacrum and laterally by the gluteus maximus and levator ani muscles, and below it ran to a point at the anal orifice.

A finger in the rectum could be pushed in the hernial mass, which was separated from the examining finger by the skin over the posterior wall of the bowel.

## OPERATION

With the patient in the prone position, a longitudinal, slightly curved, skin incision lateral to the hernial mass was made from the middle of the sacrum down to the anal orifice. The skin incision brought the rectum and terminal sigmoid into view. Gentle separation of a small mass of scar tissue permitted the posterior culdesac of the peritoneal cavity to be entered, allowing a view of the large bowel and small intestine. The sigmoid

was mobile, but it was deemed inadvisable to fix it to the anterior surface of the sacrum at its regular mesenteric attachment. The peritoneum was freed and closed with interrupted plain catgut. The levator ani was next isolated and brought together in the midline with interrupted sutures of chromic catgut number 2. The remnant of the anococcygeal body was isolated and made fast to the lower edge of the coaptated levator ani muscles. This step was done with one finger in the rectum so that the anal orifice would not be occluded. Next, the edge of the pelvic fascia and the sacrotuberous ligament was sufficiently mobilized to be brought together in the midline.

To further strengthen this opening, the gluteus maximus muscle was mobilized from the subcutaneous tissue below and the gluteus medius anteriorly, and brought together in the midline, allowing a sufficient opening for the rectum and anus.

All muscle approximation was made with number 2, forty day double chromic catgut.

Four silkworm tension sutures were passed through the skin, gluteus maximus, levator ani muscles, pelvic fascia and peritoneum and tied over gauze sponges to hold successive layers together and prevent dead space.

The skin was closed with dermal interrupted sutures.

The patient was put to bed on her abdomen and kept there fourteen days. She was catheterized and the bowels were moved by colonic irrigations. She made an uneventful recovery. The hernia was absent after nine months had elapsed.

## COMMENT

This hernioplasty was based on the same principle as any other hernia operation in other regions of the body; namely, approximation of muscles to muscles and fascia to fascia to occlude the hernial orifice.

What happened in this case was that a stout patient who had a very wide and deep pelvis had the anococcygeal body stripped from the sacral attachment during the removal of the coccyx.

No case of coccygeal hernia is on record in the present literature.

Medical Arts Building.

SUDDEN DEATH FOLLOWING THE INTRAVENOUS INJECTION OF BISMUTH TARTRATE

STEPHEN H. CURTIS, M.D., TROY, N. Y.

As most of the reports in the literature on the use of bismuth in the treatment of syphilis are favorable, I thought that it might be of interest to report the unfavorable result obtained in this case.

## REPORT OF CASE

W. H., aged 35, a mechanic, married, the father of three children, consulted me first in April, 1928, complaining of severe occipital headaches which had been persistent for five years and were relieved temporarily only by taking large quantities of acetanilid preparations. Associated with this was a marked loss of ambition and feeling of languor. His personal history, prior to the onset of the headaches, was negative. He stated that he had not had venereal infection, although at a later date he admitted the occurrence of a chancre twenty years previously. The patient was rather tall, was somewhat emaciated, and had sparse gray hair. His appearance was that of a man of 50. His skin was pale, with a somewhat bluish hue. The teeth were poor and many were missing. appeared normal. The pupillary reflexes were present. The lungs were normal; the heart sounds were clear and slow, 70 beats a minute. There were no irregularies nor adventitious sounds. The blood pressure was 110 systolic and 68 diastolic. The abdominal examination revealed nothing remarkable. There was no evidence of any adenopathy. The knee jerks were present and active. There was no evidence of a Romberg sign. The urinalysis was negative. The blood examination showed a hemoglobin of 70 per cent; red cells, 3,250,000; white cells, The smears showed some anisocytosis and a definite achromia. The blood Wassermann reaction was four plus positive with both the alcoholic and the cholesterolized antigens.