Summary and Conclusions

Abdominal pain is a prominent symptom in acute porphyria. This may be attributed to the marked hypomotility and distention which is usually present in some segment of the gastro-intestinal tract. The entire tract may at times be affected. A case is presented which manifested pronounced atony of the esophagus, stomach, and colon. These findings were evident roentgenologically in the conspicuous dilatation and the prolonged retention of barium within these structures.

Occasionally diarrhea and spasm of portions of the gastro-intestinal tract occur. The disturbance of gastro-intestinal function is probably due to the toxic effect of the porphyrins upon the autonomic nerves.

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REFERENCES


OMENTAL APoplexy*

IDIOPATHIC SEGMENTAL INFARCTION OF THE GREATER OMENTUM

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One of the anatomic entities associated with sudden "cramp like" pains in the abdomen is torsion of the great omentum. This was first described in 1851 by Pierre de Marchettis, (1) and since then many reports have appeared in the literature. In 1931, Jeffries reported 4 cases of omental torsion, 2 were idiopathic in type, the third was associated with an inguinal hernia, and the fourth with an acute appendicitis. According to Jeffries (2) the mechanism for torsion of the great omentum, may be due either to adhesions of the tip of the omentum causing the omentum to swing and twist a pedicle for itself; exaggeration of normal movements such as a sudden strain, twist of the body, or a jump; increased intestinal peristalsis; disturbance in the anatomic arrangement of blood vessels may predispose to torsion; and previous inflammatory processes leading to omental thickening and twisting. Killinger (3) collected 300 such cases from the literature.

Thrombosis in the abdominal viscera is also as-
associated with sudden agonizing pain, nausea, vomiting, bloody diarrhea, and symptoms of acute intestinal obstruction. Tiedeman (4) in 1843 and Virchow (5) in 1847 described the pathologic alterations of the mesenteric vessels. Kussmaul and Gerhardt (6) in 1863, and Litten (7) in 1875 directed attention to the clinical syndrome of hemorrhagic infarction associated with occlusion of the mesenteric artery. In patients with a history of arteriosclerosis, thrombotic valvular heart disease, or pelvic infections, severe agonizing pain in the abdomen with accompanying gastrointestinal symptoms should warrant the diagnosis of thrombosis of the abdominal viscera. Saphir (19) reported a case of abdominal apoplexy in a 42 year old male in whom the underlying pathology was mesenteric arteriosclerosis. He observed this patient for twelve years and the clinical symptomatology was indistinguishable from that of the "irritable colon" syndrome. The autopsy findings in this patient among other things revealed a rupture of an arteriosclerotic dissecting aneurysm of the superior mesenteric artery, an arteriosclerotic aneurysm of the left renal artery with a retroperitoneal hematoma. It is obvious from the above that there is an anatomic or pathologic basis for the onset of the acute pain in the abdomen.

Bush (16) in 1896 observed a 25 year old male with hemorrhage into the great omentum unassociated with thrombosis or rupture of the mesenteric vessels. Eberts (17) reported a case of spontaneous hemorrhage into the great omentum in a 25 year old male. Pellegrini (18) is of the opinion that apoplexy of the omentum, not associated with thrombosis of the vessels, torsion or adhesions, may possibly be explained on an anaphylactic basis. His patient was a 60 year old male with a history of sensitivity for certain foods. The cases reported by Bush, Eberts, and Pellegrini were diagnosed acute appendicitis before surgical intervention.

It has been our experience that one of the possible etiologic factors for sudden acute pain in the abdomen, simulating acute appendicitis, is spontaneous hematoma or apoplexy of the omentum. We have had occasion to observe two such cases within the past ten years.

**Case Reports**

**Case 1.** A 63 year old white male engraver, in apparent good health, was seized with a sudden sharp pain in the abdomen 30 hours before admission to the hospital. This was accompanied by a persistent nausea, but no vomiting. At first the pain was rather diffuse over the entire abdomen, but when admitted to the hospital, the pain and tenderness was localized in the right lower quadrant. His temperature on admission was 100°F and the leukocyte count was 11,000. General physical examination inconsequential. BP 146/58. A diagnosis of acute appendicitis was made and surgery was performed. Postoperative diagnosis: Localized area of hemorrhage and gangrene of the omentum and localized peritonitis in the right lower quadrant.

He received intravenous glucose (5%) in saline. For the first 24 hours, his temperature was 100°-102°F, pulse 89, respiration 24-30. On the second postoperative day his temperature was 99°F. He made an uneventful recovery and was discharged in good condition 14 days after his admission to the hospital.

**Pathologic Report:** Appendix 3 cm. long, pale red in color; the lumen is markedly narrowed and almost completely obliterated. The muscularis and serosa show no gross abnormal changes. There is a portion of omentum 10x7 cm., red in color, somewhat firm in consistency. In the midportion there is a red area 3x1.5 cm. which on section shows hemorrhage. The smaller blood vessels in this area contain blood clots.

**Microscopic examination:** Sections taken from different portions of the omentum show outlines of fat cells with a small amount of supporting fibrous tissue. The blood vessels are dilated and thrombosed and in several the entire lumen is occluded by a clot. There is no evidence of atherosclerosis in the blood vessels. Sections of the appendix show that the lumen is obliterated by an increase in fibrous connective tissue in the submucosa. The muscularis and serosa are unchanged.

**Diagnosis:** Thrombosis of the mesenteric vessels with hemorrhage in the surrounding stroma. Fibrous obliterative appendix.

![Figure 1. Section of omentum showing thrombosis of vessels with hemorrhage into omentum](image)

**Case 2.** A 34 year old white male chauffeur was in good physical condition when he was suddenly seized with an acute abdominal pain 48 hours before admission to the hospital. He stated that the pain was gradual in onset, first diffuse over the entire abdomen and later more pronounced in the right lower quadrant. The intensity of the pain was slightly relieved by sitting down or bending forward. The pain was persistent, not "cramp like," and did not radiate in any direction.

When he was admitted to the hospital, his temperature was 100° F., pulse 105, respirations 30. General physical examination negative except for the acute pain and tenderness in the right lower quadrant of the abdomen and slightly lateral to McBurney's point. Leukocyte count was 13,000; urine: albumin 4 plus and many granular casts. The impression was acute suppurative appendix.

Under a general anesthetic (Ethylene) a McBurney's incision was made. The parietal peritoneum in the area of McBurney's point was congested and edematous. A portion of the omentum 6 cm. in diameter was gangrenous and it was excised. The appendix was grossly normal but it, too, was removed. Postoperative diagnosis: Localized area of hemorrhage and gangrene of the omentum and localized peritonitis in the right lower quadrant.

Following surgery the patient received Hartman's solution and 5% glucose. His temperature during the first 48 hours after surgery was 99°-100°F, pulse 110-92, and respirations 20-24. On the 4th postoperative day-albumin, casts and leukocytes disappeared from the urine. The patient made an uneventful recovery and was discharged in good physical condition 15 days after admission to the hospital.