

that the gall-stones felt before the administration of the oil were still present after the oil had produced its benign effects. He subjoined a brief account of three cases in which large doses of sweet oil were given. None of them presented any history of hepatic colic, yet the use of the oil was in each case followed by the expulsion of masses dark green and whitish in color. In each of these cases the administration of the oil had been preceded by a dose of calomel. In a fourth case no calomel was given, and no masses were seen in the evacuations. This seems to show that the masses are formed when the oil is met in the intestines by a large quantity of fresh bile.—*New York Med. Rec.*

VARIETIES OF HEPATIC CIRRHOSIS.—Saundry (*Brit. Med. Jour.*), in an interesting article on this subject, recognizes ten varieties: Alcoholic, cardiac or cyanotic, biliary, diffuse syphilitic, gummatous syphilitic, tuberculous, malarial, scarlatinal, rachitic and diabetic.

The alcoholic variety is caused by the abuse of alcohol. It is most frequent in adult males. The symptoms usually complained of are hæmatemesis, or abdominal dropsy; those who present the symptom of ascites are usually without hæmatemesis, and those who have hæmatemesis are usually without ascites. Dyspeptic symptoms are common. The skin is of earthy tint and rarely jaundiced. The spleen is usually enlarged, and the liver diminished in size. Cases of hæmatemesis are without dropsy, because the dilated veins surrounding the œsophagus allow the blood from the portal vein to reach the vena cava without passing through the liver. The liver is small, granular and of an olive color, having bands of connective tissue in the portal canals surrounding groups of acini, and invading them from the periphery. Early and repeated tapping in cases of ascites may indefinitely prolong life if alcohol is abstained from.

The cardiac variety is due to the chronic congestion of the right side of the heart. The liver is enlarged and tender. The cirrhosis begins in the radicles of the hepatic veins. There are often slight jaundice and ascites. The biliary variety he considers due to chronic obstruction of the common duct. Jaundice is the initial symptom; ascites is generally absent. The liver is generally enlarged, and he considers it the best-known form of what is called hypertrophic cirrhosis. The trabeculae of fibrous tissue surround the single acini. The treatment is palliative, unless the obstruction can be removed by surgical means.

Diffuse syphilitic cirrhosis is caused by hereditary syphilis. The liver and spleen are both enlarged, and the lesion is diffuse. It is best treated with calomel. The gummatous syphilitic form is due to fibrous tracts left by old gummata. The liver is puckered.

The tuberculous variety is little recognized. The liver is enlarged, the trabeculae surround the lobules, and there is enlargement of the biliary canaliculi, but ascites is absent. In malarial types of this disorder the liver is enlarged. The cirrhosis begins in the portal canals and invades the lobules. There is no ascites. The scarlatinal form is known only to pathologists, and it may explain some large livers found, *post mortem*, in children. There is increase of the fibrous material in the portal canals. The rachitic variety is the cause of much of the gastro-intestinal catarrh in children. The liver is enlarged, and the fibrous material surrounds single acini. The treatment includes calomel and cod-liver oil. Diabetic cirrhosis is little known. There is no ascites. The skin is bronzed, but jaundice is absent. The fibrous tissue is formed about the hepatic radicles.

WHAT IS PAIN?—It was John Hilton, I think, who gave expression of greatest import to a truism in regard to pain, that is well worthy of our remembrance. Indeed, he has so forcibly written upon this subject in his valuable work of "Rest and Pain," that he has been quoted up on this subject more often than any other writer. He declares that "every pain has its *distinct* and pregnant signification if we will but search for it"; that "pain, the monitor, and rest the cure, are *starting* points for contemplation."

In this connection it may not be out of place to consider, but for a moment, something of the nature of pain; its laws of production and conduction; of radiation and reflection, as having direct bearing upon our case.

Buzzard has defined the term pain, "a representation in consciousness of a change produced in a nerve centre by a certain mode of excitation."

Accepting this definition, as we do most as merely a "*working* definition," we observe that it presupposes a knowledge of at least two histological structures, viz. a kind that is susceptible of being excited and conveying impulses, as the nerves and their terminations; and, secondly, structures capable of receiving impulses conveyed by these nerves, viz., *centers*, both of cord and brain. It is to be understood that the cause or place of the irritation of any pain may be located any place between the centers and nerve terminations; but by the "law of peripheral reference of sensations," as it is called, the pain is invariably referred to the peripheral end of the nerve of one or more of its branches. This law is most emphatically and wonderfully observed after amputations, and our surgeons tell of many interesting incidents in this connection.—Beebe, *Lancet Clinic*.

ACUTE TRAUMATIC TETANUS; CURE.—The mortality attending this form of sepsis reaches such a high rate that the following case presents