

permitting of bending or making movements throws undue tension upon the walls, and the ulcer thereby strained. He should be so managed that all involuntary motion of pylorus and duodenum is minimized, and to lessen the amount of gastric secretion, decrease acidity and enzyme activity of the gastric juice before it passes the pylorus.

The patient must be made comfortable in bed, as well as contented: soft and elastic mattress, sheets clean, freshened, light clothing. The room well ventilated, and the light not allowed to strike directly in the patient's face. A sponge bath or alcohol rub with massage should be given daily, avoiding manipulation of the abdomen. Mental calm is important, where possible treatment is better followed out in the hospital.

The second essential is physiologic rest to the duodenum. For this there must be a controlled or decreased gastric secretion. Therefore nourishment must not be taken in the usual manner. Exclude, if possible, spasm or excessive tonus and peristalsis. The patient should be confined to an unstimulating fluid or pultaceous diet. Milk, milk porridge, rice, gruel, sugar, raw egg yolks, uncooked butter, cream and oil, until 2,000 to 2,500 calories are taken daily. Clean the colon with bowel washes, assisted by magnesia. Irritation and an over tonic state of the pylorus should be relieved by large doses of bismuth. At times it is best to require a fast of twenty-four hours. Relief may follow the taking of purified vaseline or olive oil every two or four hours. For persistent tonicity at pylorus, a hypodermic injection of atropine in full doses, followed by fasting for a day or two and rectal alimentation. Adrenaline subcutaneously for spasm is sometimes most favorable—1 c.c. of 1-1,000 solution. Hot poultices and hot fomentations meet with partial success in a great majority of cases. In some the symptoms are relieved with ice and tends to decrease hemorrhage. To control gastric secretion and decrease gastric hyperacidity, the most successful antacid is light calcined magnesia, bismuth sub-carbonate and lime water. Vaseline and olive oil afford relief in cases of over-acidity. Animal broths and extracts should be excluded from the diet. Another method of relieving gastric secretion and to overcome pyloric spasm is the duodenal alimentation of Einhorn. This is a new and important means for the treatment of both gastric and duodenal ulcer. To relieve hemorrhage there should be complete bodily and mental rest, fasting two or three days, normal saline per rectum, probably with some calcium lactate in the water. But the most efficient is the sub-cutaneous injection of serum as devised by Clowes and Busch, now on the market as "Coagulose."