

**Treatment of Peptic Ulcer with Gastric Mucin.**

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In the literature on gastric secretion, the capacity of mucus to lower the free acid in the stomach is repeatedly suggested. While working on the "Relationship between Gastric Secretion and Basal Secretion of the Stomach" Lim determined that the concentration of the mucus in the stomach is highest at the lower secretion rates. The problem here was to determine the effect of increasing the mucus content of the stomach upon the free HCl. To evaluate the antacid effect of gastric mucin, it was necessary to either stimulate the secretion of mucin or to administer mucin by mouth. In these experiments attempts at stimulation failed to give consistent results, therefore a neutral preparation of hog mucin was prepared. Two ounces of this mucin in the stomach of Pavlov pouch dogs, after stimulation with 1 mgm. of histamine, was found sufficient to keep the stomach free of free HCl despite the fact that the pouches in these dogs showed adequate gastric secretion. Free HCl would always be present if the same experiment were performed and egg albumen, gelatin or meat substituted for the mucin. When half an ounce of mucin mixed with a pound of meat was fed the dogs, no free HCl was present during an observation period of 5 to 7 hours.

Since January, 1930, twelve patients with definite ulcer histories and typical roentgen findings of peptic ulcer were available for study. In addition to the customary bland diet, one ounce of powdered mucin was added to each meal and about 1 gm. of mucin in tablet form given hourly. All these patients were relieved of subjective symptoms within 3 days of treatment and as yet there has been no recurrence of the pain in observation periods of 2 to 5 months.