PSYCHOSOMATIC MEDICINE—VOL. II, NO. 1, JANUARY, 1940

TOTAL GASTROSPASM

Psychological Factors Involved in Etiology—Case Report

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Introduction

IN THE ABSENCE OF DEMONSTRABLE ORGANIC DISEASE, subjective gastrointestinal symptoms are usually ascribed to functional causes. So applied the term "functional" indicates a disturbance of the normal motor and secretory function of a gastrointestinal viscus. In many instances, "functional" merely masks our ignorance as to the specific cause of symptoms. Patients' complaints are still commonly dismissed by the busy practitioner with, "Your trouble is due to nerves," or, "You are imagining these symptoms." The usual advice is to forget about them. The more erudite recognize their ignorance as is shown by increasing interest in psychosomatic investigations directed toward understanding the cause of functional gastrointestinal symptoms.

The influence of the autonomic nervous system on the motor and secretory mechanism of the gastrointestinal tract has been somewhat clarified in recent years by the correlation of the work of anatomists, physiologists, pharmacologists, and surgeons (*8*, *2*). Eppinger and Hess (*6*) attempted to explain functional gastrointestinal disorders as an autonomic-system imbalance between the vagus and sympathetic systems. We know now that numerous functions controlled by these systems cannot be clearly defined by physiological methods, with the result that the concept of vagotonia and sympathectonia have recently faded in importance.

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Somatic symptoms such as nausea, vomiting, constipation, and diarrhea are commonly instituted by conscious psychological disturbances such as violent anger, fear, and terror, and are obviously due to disturbances in the mechanics of normal gastrointestinal function. Important observations in this field have been made by Cannon (*4*) and Alvarez (*3*). Probing deeper into the subconscious in attempts to elucidate the influence of the psyche on gastrointestinal symptoms are the psychoanalytic investigators, notably Alexander and his coworkers at the Chicago Institute of Psychoanalysis (*1*). The case here reported warrants presentation for two reasons. First, roentgenograms of total gastrospasm are rarely seen. Secondly, from the clinical aspect, this patient presents psychological data which simulate closely the emotional patterns which the analysts, notably Alexander, believe are important factors in the etiology of gastric dysfunction.

CASE REPORT

P. M., female, aged 40, divorcée, merchandizing executive, generally in good health, a complete physical examination of recent date revealed no significant abnormalities. No previous gastrointestinal complaints The evening before examination, patient arrived home in great nervous distress. She complained of a pressure localized in the epigastrium. This was accompanied by nausea and a desire to belch, which latter was induced through the mechanism of air swallowing. Bicarbonate of soda, heat to the abdomen, and enemata failed to relieve her symptoms. After re-

Fig. 1. Total gastrospasm immediately after ingestion of barium. Subjective symptom—epigastric pain.

tiring, pressure in the epigastrium changed its character, gradually becoming a distinct localized griping pain, severe enough to

Fig. 2. Spasm persists after atropine sulfate administered intravenously.

prevent sleep. Pain continued unabated until morning when she was seen at my office.

Physical examination of the abdomen revealed only tenderness over the entire epigastrium; rigidity was absent. Temperature was normal and pulse 90. The functional nature of her conditon was suspected and as patient had had no breakfast, immediate roentgenographic examination was performed (*Fig. 1*). A markedly contracted stomach was seen roentgenoscopically as

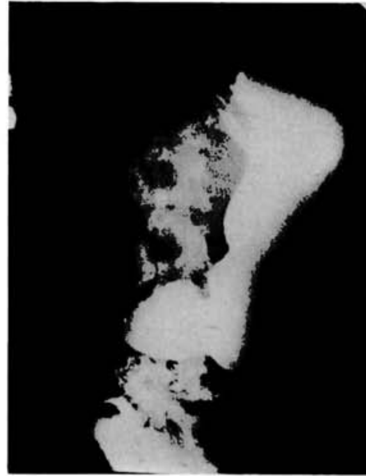

Fig. 3. Same patient as Fig. 1, twenty-four hours later. Stomach again filled with barium and of normal contour. Pain and spasm now absent.

well as on the films. The stomach was drawn high into the left epigastrium, with the antral portion directed downward and medially, the pylorus being rigidly patent. Peristalsis was not seen, although the meal emptied continuously. Atropine sulfate, gr. 1/100, was injected slowly intravenously and after 10 minutes the physiological effects of dryness and blurring vision occurred. Re-examination (*Fig. 2*) showed no essential change in stomach contour except further emptying.

Patient was sent home, ordered to bed, and an adequate barbiturate was ad-

ministered for sedation. On her return to the office next morning, patient reported that she had slept about 14 hours, felt very well, had eaten a light supper and breakfast. Pain and all other symptoms had completly subsided. Slight epigastric tenderness persisted. Roentgenographic and roentgenoscopic examination at this time revealed the stomach in normal position, size, tone and motility. Some barium was present in the colon from previous examination (*Fig. 3*).

COMMENT

A case of acute total gastrospasm is presented. Diagnosis was suspected from the history and paucity of physical findings. Roentgenographic evidence substantiated this diagnosis. According to Feldman (*7*) regional (pylorospasm) or circumscribed (hour-glass) gastrospasm are frequent, but total spasm involving the entire stomach is the rarest form encountered. Carman (*5*) in a paper on "hour-glass stomach" discusses one patient with total gastrospasm whose roentgenograms were similar in appearance to those of the patient herein shown.

Alexander's theory of emotional conflict as a cause of gastric symptoms so completely fits the personality picture in my patient that a brief presentation of his views would be valuable. Alexander (*1*) found during psychoanalytic investigations that gastric symptoms often appear in patients with intense oral-receptive tendencies, *i.e.*, the wish to be taken care of and loved. These deep subconscious desires are incompatible with the ego of these adult individuals who consciously aspire to be aggressive, independent, and to accept responsibility. A conflict situation thereby exists in which the subconscious oral-receptive tendencies are violently repressed and denied by the conscious ego of these patients.

"It is highly characteristic that in their actual life relationships, they avoid dependence and assume the exact opposite of the infantile oral-receptive attitude. Instead of receiving, we often see in them the tendency to give, instead of leaning on others, leadership, instead of dependence, they assume responsibility. These over-compensations must increase in their unconscious the longing for passive dependence and so these individuals often live beyond their psychic means.

"The function of nutrition is especially adapted to express the results of this conflict. The infantile wish to receive, to be taken care of, is ideally present in the suckling infant. The emotional qualities of receptivity, the wish to be taken care of and loved, become closely associated in an early period of life with the physiological functions of nutrition. Being fed thus becomes the primordial symbol of being loved. If the intense wish to receive, to be loved, is rejected by the adult ego, and consequently cannot find gratification in normal life relationships, then only the regressive pathway remains open; the wish to be loved becomes converted into the wish to be fed. The repressed longing to receive love and help mobilizes the innervations of the stomach which, since the beginning of extra-uterine life, are closely associated with the most primordial form of receiving something, namely the process of receiving food."

Since this stimulus has its origin in emotional conflict and is not dependent on the normal physiologic stimulus to receive food, *i.e.*, hunger, dysfunction eventually results, the stomach behaving constantly as it does during hunger with constant hypermotility and hypersecretion. The more intense the conflict situation, the more intense the stimulus to the stomach and, consequently, the greater the response in its motor and secretory functions.

To summarize, the psychoanalytic

concept of the origin of gastric neuroses and peptic ulcer, is based on the analytically well established fact that the deep subconscious wish to be taken care of and to be helped, which has constantly been found in the investigated gastric cases, is emotionally connected in the unconscious with the wish to be fed. These deep unconscious motives are strongly rejected by the adult whose ego manifests itself by overcompensation in conscious drives of aggression, giving, and acceptance of responsibility. This conflict situation expresses itself regressively in the primordial symbol of being loved, that is, being fed. This emotional stimulus acting through the innervation of the stomach engenders a response similar to that of the physiologic stimulus, hunger. This constant stimulation results in chronic hypersecretion and hypertonicity which eventually results in dysfunction.

The emotional pattern of the patient reported herein fits in well with this concept. Briefly, the pertinent personality characteristics are these: My patient is a buyer of dresses in a large New York department store, had little formal education, and started her career as a salesgirl. After a period of four years, she became head of her department, a position of great responsibility requiring aggressiveness, executive ability, and sagacity. She is well liked by her employers and business associates, has a reputation for fairness, and is over-generous and expansive. At the age of twenty she married and was happy for a time. After several years her husband began to drink heavily, became abusive, and financial difficulties arose. She obtained employment as a manikin, became financially independent, and divorced her husband after eight years of marriage. She lives alone, has many friends, male and female, has a relatively gay time, occasionally indulging in alcoholic excesses as an outlet for nervous tension and mild depressions. She chooses convivial companions for these drinking bouts. She has had several transient love affairs but has not remarried. We have therefore, an aggressive, independent productive, giving individual with a well marked neurotic make-up, whose ego consciously rejects help from, or dependence on others.

For the last few years she has spent her summer holiday of two weeks visiting her mother who lives in a country village two-hours distant from New York. She sees her mother frequently weekends, and shares the cost of her mother's support with her brother. This year she planned an ocean voyage alone, and, as she feared her mother's recriminations regarding her holiday plans, she delayed informing her parent until the last weekend before sailing. As expected, the old lady keenly resented the loss of her daughter's yearly visit, and was very sharp in her criticism of her daughter's lack of filial sentiment. These accusations continued throughout the weekend and caused great nervous distress in my patient, due obviously to anxiety and guilt. On Monday, after sleeping poorly, she quarreled bitterly with her assistant at the store, over a long standing defect in business procedure. This episode left my patient in a state of nervous tension very alien to her usual feeling of well-being. The following evening, Tuesday, Mrs. P. M. was to give a radio talk on the subject of her rise to success as a department store buyer. This being her first talk on the air, she was frightened as to possible failure before the microphone and studio audience. This caused nervousness and irritability throughout the day and evening. After her radio talk she arrived home in a highly nervous state and with gastric symptoms as previously described.

SUMMARY

In this patient, therefore, we have an individual with a personality pattern very similar to that of patients with gastric dysfunction described by Alexander. My patient is a neurotic woman with a strongly over-emphasized independence whose ego consciously rejects help or assistance from others. By an unusual series of events, strenuous emotional situations arose in her environment which probably motivated deep oral-receptive drives. These subconscious drives accumulated in intensity to the point where her ego could not repress them further, and eventually they expressed themselves regressively as somatic, gastric disease, in this instance, gastrospasm. Relief of subjective symptoms and of spasm, shown roentgenographically, followed adequate sedation.

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