THE PERIODIC DYSPEPSIA SYNDROME

BY

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We are all familiar with the syndrome of periodic dyspepsia which so frequently commences in the middle to late teens, but which may occur for the first time at any age later on. The main symptomatology is that of pain, perhaps just discomfort, which invariably has some definite time relationship to meals and which is usually relieved by alkalies—sometimes by change of posture, pressure, or by the local application of heat—but which may be relieved or aggravated by food. The pain, or discomfort, may or may not be accompanied by varying degrees of nausea with or without vomiting. Associated symptoms may be heartburn and/or waterbrash. Gastric flatulence is not infrequently an associated symptom.

The commonest site of the pain, or discomfort, is in the epigastrium, usually high up in the mid-line or just to the right or left of the mid-line. The pain is variously described as a "feeling of discomfort," "a gnawing pain," "a dull ache," "a sharp pain," etc.

The pain may radiate to the right or to the left or it may bore through to the back between the shoulder-blades. Sometimes pain occurs low down in the mid-line just above the umbilicus.

Nocturnal pain, awaking the patient from his sleep is a frequent and important symptom. In patients with duodenal ulcer there is a high night secretion of acid.

Periods of freedom from symptoms may last for days, weeks, months or even years and have an undoubted relationship to the presence, absence or exacerbation of mental stress or emotional tension.

Barium meal, fractional test meal and examination of the stools for occult blood, after due preparation, may reveal nothing abnormal. Some cases just show varying degrees of hyperchlorhydria with a hypermotile, hypertonic and rapidly emptying stomach. Others show, in addition, appearances described by the Radiologist as "pylorospasm" or "duodenitis." Some of these cases may show occult blood in the stools. Luckily for the patients, as regards proper treatment, in a number of cases an ulcer is demonstrated on opaque meal examination.

The abnormal psychogenic constitution of the patient who suffers from periodic dyspepsia syndrome is always apparent to the experienced observer and it merely varies in degree in the different cases.

This syndrome is believed to be a psychosomatic manifestation and may exhibit signs of an organic nature. In this connexion the following extract from
a copy of the *Journal of the American Medical Association* of a few years ago is of interest:

“A patient with a large gastric fistula whose mucosa is readily accessible to view has been studied with regard to the possible genesis and persistence of tissue damage. It was found that:

1. Acid in small amounts was continuously elaborated in the subject under basal conditions.
2. Spontaneous transitory phases of accelerated secretion of acid occurred from time to time. These were accompanied by blushing of the mucous membrane and vigorous contraction of the stomach wall.
3. Emotions such as fear and sadness, which involved a feeling of withdrawal, were accompanied by pallor of the gastric mucosa and by inhibition of acid secretion and contractions. This complex was encountered infrequently in our subject.
4. Emotional conflict involving anxiety, hostility and resentment was accompanied by accelerated acid secretion, hypermotility, hyperemia and engorgement of the gastric mucosa resembling “Hypertrophic gastritis.” This series of events was much more commonly observed in our subject. It was associated with gastrointestinal complaint of the nature of heartburn and abdominal pain.
5. Intense sustained anxiety, hostility and resentment were found to be accompanied by severe and prolonged engorgement, hypermotility and hyper-secretion in the stomach. In this state mucosal erosions and haemorrhages were readily induced by even the most trifling traumas, and frequently bleeding points appeared spontaneously as a result of vigorous contractions of the stomach wall.
6. Contact of acid gastric juice with such a small eroded surface in the mucous membrane resulted in accelerated secretion of acid and further engorgement of the whole mucosa. Prolonged exposure of such a lesion to acid gastric juice resulted in the formation of a chronic ulcer.
7. The lining of the stomach was found to be protected from its secretion by an efficient insulating layer of mucus, enabling most of the small erosions to heal promptly within a few hours. Lack of such a protective mechanism in the duodenal cap may explain the higher incidence of chronic ulceration in this region.
8. It appears likely, then, that the chain of events that begins with anxiety and conflict and their associated overactivity in the stomach and ends with haemorrhage of perforation is that which is involved in the natural history of peptic ulcer in human beings.” (Wolf and Wolff).

The early cases of the periodic dyspepsia syndrome which consist of symptoms but no signs (Ba meal, fractional test meal and stools all normal) have very frequently the great misfortune to be diagnosed as “functional dyspepsia.” Such also is the frequent fate of other cases where the symptoms of the periodic dyspepsia syndrome are well marked and where, although opaque meal and stool examinations are negative, the patients have varying degrees of hyperchlorhydria. Such individuals who are “radiologically negative” are diagnosed as either “dyspepsia,” “hyperchlorhydria” or “functional dyspepsia.” Often last term is used almost as a stigma by some. A number of medical men use it in such a fashion as to imply that the patient is really a malingerer. Some, indeed, use instead the word “neurotic” in the manner so characteristic of one type of physician whose actual knowledge of psychology and psychiatry is negligible.

I have heard distinguished physicians stating quite definitely that we should be able to recognize the patients with so-called “functional dyspepsia” on
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first interviewing them and that on no account should they ever be admitted to hospital as a full investigation is not only useless but also dangerous as it would fix their minds on their alimentary tract. Furthermore they have advised that should such cases ever be admitted to hospital in error (!) they should be discharged within a week. This is a fallacy. Such an attitude is hopelessly wrong, dangerous and cruel. It shows a complete lack of appreciation of psychosomatic medicine.

Cases of the syndrome having the good fortune to exhibit evidence of "duodenitis" or "pylorospasm" are usually diagnosed as having organic disease and so receive reasonable treatment for their complaint. However, what a difference there is in the attitude of the medical man to the patient if an opaque meal, instead of revealing "pylorospasm," "duodenitis," or "no evidence of ulcer seen," results in a report of "ulcer present." Such a patient is put to bed—maybe for as long as three months and is given facilities for the adequate treatment of peptic ulcer which should be available for all cases of the periodic dyspepsia syndrome, with or without signs.

It is indeed fortunate that an increasing number of physicians regard peptic ulcer as a psychosomatic manifestation and as one of the later stages of the periodic dyspepsia syndrome. It does seem such a tragedy that the patients who suffer from periodic dyspepsia with symptoms but no signs, should be labelled in almost pitiless fashion as "neurotic" whilst patients with similar symptoms but, in addition, signs—especially the radiological demonstration of an ulcer which frequently depends on the technical skill of the radiologist—should receive the adequate therapy which all cases should have received even in the absence of signs. How many cases of peptic ulcer, with or without hæmatemesis and/or melæna, have many of us seen who tell us that they have had these symptoms for years; that they have had a full gastric investigation, excluding gastroscopy, with negative results, and who had been diagnosed repeatedly as "functional dyspepsia"?

In the stage with symptoms and no signs the psychogenic constitution of the patient is obvious. He is bright eyed. He is usually a hyperconscientious, most introspective, active and worrying type of individual who goes to bed with his worries and finds them a disturbing bed fellow. He never stops worrying, takes his responsibilities too seriously and at times lets them get the better of him. Later, as symptoms are accompanied by signs, the emotional aspect of the clinical picture would appear to diminish but it is still obvious to the experienced observer. In other words, the observer is now more attracted to the physiogenic aspect of the case, whereas formerly he was attracted to the psychogenic aspect. It is such an established case which some physicians talk about as being phlegmatic and obviously not of psychogenic origin.

It is appreciated that a minority of the profession to-day accepts the view that the periodic dyspepsia syndrome with symptoms and with or without signs is purely a psychosomatic disorder. Nevertheless, no local or general cause of peptic ulcer or of the symptoms of the pre-ulcer state have been demonstrated in satisfactory fashion. Furthermore the British have reported
a high incidence of ulcer disease both in troops evacuated from France in the early part of the war and in those stationed in Great Britain.

"In Germany an interesting study has been made on the ammunition workers of the Krupp factories. Rothe reviewed 7,488 gastric X-ray studies on workers and their families during the three years between November 1937 and October 1940 and observed an increase in the total number of examinations from year to year as well as a relative increase of positive findings.

"Among these findings, duodenal ulcers were the most common. Beginning with September 1940 the number of duodenal ulcer scars increased. An interesting study of the incidence of ulcer perforation during heavy air raids is reported by Stewart and Winser. Investigation of the perforation rate in London from January 1937 to August 1940 showed that the monthly average was 23. In September 1940 and October 1940 (heavy air raid period) the monthly average rose to 64 (J.A.M.A.)."

This would suggest that anxiety at least aggravates the factors producing perforation. In addition it is accepted that emotional stress produces exacerbations of active symptoms in patients who suffer from the periodic dyspepsia syndrome. "If I have any worry it flies to my stomach, doctor." How often have I heard that in proven ulcer cases!

On reviewing 2,500 dyspeptic patients admitted to several military hospitals in various parts of Great Britain Tidy found that 35 per cent of the total were functional in nature.

I consider, from the point of view of recruiting and the selection of individuals for special appointments, it is essential that it should be recognized that the periodic dyspepsia syndrome with symptoms but no signs is merely the early stage of full-blown peptic ulceration, with all its potential complications and attendant evils.

With the relatively high incidence of the periodic dyspepsia syndrome it would be unreasonable to reject all such sufferers from military service. Nevertheless, most will agree that soldiers with ulcers are unfit for active service. In spite of this, at least one German writer believed that even chronic ulcers are capable of permanent cure and that no one should be declared as permanently unfit for military service until an adequate course of treatment has failed. I consider that this is a progressive and enlightened attitude and one which should be commended and recommended.

"Swiss Army doctors apparently feel that soldiers with healed ulcers can be utilized provided that they are assigned to "diet companies" and to stations in which special diets can be carried out. Practically all writers agree that officers with healed ulcers can render useful army service."

"The present policy in the U.S. Army regarding the acceptance of candidates who have had peptic ulcer is stated by General C. C. Hillman, Chief of the Professional Services Division of the Surgeon-Generals Office as follows:

"In view of the fact that officers are generally able to look after their diet somewhat better than enlisted men it is the policy of this office to accept for limited service applicants for commission who have histories of gastric or duodenal ulcer, provided such histories indicate freedom from activity during the preceding five years and provided further that gastrointestinal X-ray at the time of examination is negative. For enlisted service the presence of an ulcer or a trustworthy history of one at any time
in the past is considered disqualifying. Because of the unusual habits of soldiers and their inability to give themselves appropriate dietetic care in military messes it has been the custom during times of peace to discharge soldiers when a definite diagnosis of peptic ulcer has been made."

In the days when a soldier "marched on his stomach" I would have agreed with such a policy but nowadays with our highly specialized and ever expanding Army, full of specialists, technicians and intellectuals of all types, we have need of many who suffer from somatic disfunction. In the atomic age we can employ them all in the armed forces in special jobs to suit their intellectual capabilities and their psychogenic susceptibilities. This can be facilitated if we treat such cases with psychotherapy as well as with all the requisite treatment which most consider adequate to-day. This includes in certain selected cases partial or subtotal gastrectomy or vagotomy. Psychiatrists should see all chronic and repeatedly relapsing cases. Should they receive psychiatric treatment—and so obtain a full insight into their condition—as well as physical treatment, there is an increased likelihood of a more lasting cure. At least the incidence of relapse should, be materially lessened.

I consider it most fortunate that there is an increasing band of physicians who regard the terms "functional" and "neurotic" in a far different manner than their predecessors and with the same respect that they regard plague, pneumonia and typhoid fever, etc. Many still deny that there is evidence that the periodic dyspepsia syndrome with signs is a psychosomatic manifestation. I agree that there is no overwhelming evidence of this but its very nature, course and behaviour are that of a psychogenic disorder. In addition, we do know that chronic and sustained emotional stress was associated with an increase in the incidence of peptic ulcer perforation and can produce haematemesis due I presume, to acute superficial ulceration or erosion.

It is not suggested that all cases of dyspepsia are of psychogenic origin and due care is always taken to exclude, amongst other conditions, tuberculosis, neoplasm, lymphadenoma, hepatitis, renal conditions, gall bladder disease, pancreatitis, chronic appendicitis, splenomegaly, anaemia and conditions associated with local or general increase of venous pressure, etc., etc.

It is my firm belief that if all cases of periodic dyspepsia syndrome with symptoms, and with or without signs, were regarded as and treated as proven cases of peptic ulcer and so regarded as a psychogenic disorder with somatic dysfunction then adequate therapy, i.e. present day therapy plus psychotherapy, would increase in great measure the interval between exacerbations and would certainly lessen the incidence of relapse. In the treatment of the periodic dyspepsia syndrome, with or without signs I feel that there is one great omission. That is the failure to explain to the patient the mechanism of production of his symptoms and signs. If the patient be given complete insight into his condition and if it be tactfully impressed on him that should failure attend his efforts—dietetic and/or otherwise—to keep symptom-free, then that failure is his—i.e. a personal failure and should be regarded by him as a mental defeat on his part. Instead many such patients seek medical advice or rather sympathy and while they are in need of the former, the latter should
be exhibited with judicious care, and should be tempered with diplomatic straight talking. Too much reliance is placed on alkalies and not nearly enough use is made of common sense and plain speaking tactfully done. Of course this might result in some patients changing their doctor but any doctor who really knows his patient and who has a good knowledge of his subject should be able to convince the patient.

I tell my patients that in dealing with all their problems whether they be professional, occupational, domestic, marital, environmental, or financial, etc., they should clear the "in" tray and "out" tray every day and, at the end of the day, have nothing in the "pending" tray.

Intelligent patients are ready to believe the psychogenic origin of their symptoms as it is obvious to them how much they suffer during periods of mental stress. The help of a psychiatrist should always be sought in the miserable and chronically relapsing case.

A strong plea is made that all cases of the periodic dyspepsia syndrome should, for the sake of uniformity, close study and follow up, be diagnosed as follows:

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If this system were adopted every patient’s record card would make interesting reading over a period of years. In such a way this syndrome would be put in its true perspective from the very beginning and so save a "gastric-neurotic" from being treated with the scorn and contempt born of ignorance until he is subsequently shown to have an obvious peptic ulcer on radiological examination or, worse still, until he is laid low and almost dies from a hæmatemesis.

The reader may take me to task and say that there is much that I have written that is not proven and much that is open to question and controversial. With such an attitude I am ready to agree. However, the whole object of the paper is to emphasize the aetiological—or at least associated—psychogenic aspect of the periodic dyspepsia syndrome with symptoms, whether signs are present or absent. If this has been done and if interest in the need for psychotherapy, as well as the usual routine therapy adopted by everyone to-day, has been stimulated then I consider that my object will have been achieved.

The sections inset are either quoted from an editorial on the subject of dyspepsia which appeared in the Journal of the American Medical Association during the war or extracted from some similar topics in the J.A.M.A. For these I make grateful acknowledgment. I regret that I have lost the actual references.
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ACKNOWLEDGMENTS

Major-General Sir Edward Phillips, K.B.E., C.B., D.S.O., M.C., D.M.S. British Army of the Rhine for permission to forward this paper for publication.

Major-General Sir Alexander G. Biggam, K.B.E., C.B., M.D., F.R.C.P.Edin. and London, formerly Consulting Physician to the Army, etc., Brigadier F. J. O'Meara, M.D., F.R.C.P.I., D.T.M.&H.Eng., Consulting Physician, B.A.O.R., and Brig. C. W. B. James, formerly Consultant in Psychiatry M.E.F., etc. for their helpful criticism for which I am most grateful but they must not be considered to agree with anything controversial which I have written.

REFERENCES

For an up-to-date review of this subject I would refer the reader to the March and April numbers of the Post-Graduate Medical Journal, 1948.
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*J R Army Med Corps* 1948 91: 36-42
doi: 10.1136/jramc-91-01-02

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