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Panendoscopic Changes in Chronic Anxiety Patients

By A. El-Zayadi, A. Sadek, F. Lotaif and Zeinab Bishry

ABSTRACT

Twenty-five chronic anxiety patients suffering from dyspepsia were the subject of this work. All the cases were assessed endoscopically and twelve of them psychologically. The Eysenck personality inventory (E. P. I.) reported that our patients are higher neurotics and rather introvert. Panendoscopy showed increased physiological gastric mucus (84 %) duodeno-gastric reflux (72 %).antral hyperperistalsis (64 %). pylorospasm (60 %) and inflammatory changes in the oesophagus (52 %), stomach (48 %) and duodenum (44 %) All such changes were explained to be secondary to motor disturbances of the gastro-intestinal tract.

INTRODUCTION

Anxiety state is one of the commonest medical and psychiatric problems encountered in medical practice. At least one quarter of the patient community complain of various manifestations of anxiety both psychological and psychomotor (Okasha, 1980). One of the most common manifestations of anxiety is gastro - intestinal complaints Such complaints coincided in time with life situations perceived by patients as stressful and giving rise to feelings of emotional conflict (White et al., 1939). The failure to find an explanation for the digestive complaints in objective findings on clinical examination had lead to wide spread confusion.

Wolf and Wolff (1943) made a prolonged observation of the gastric function of a single human subject through a large permanent gastric fistula. They showed bidirectional changes in function of the stomach in situations of depression and anxiety.

The motility of the human upper gastro-intestinal tract has been studied both by kymography (Abbot et al., 1952) and by Cineradiography by Wolf and Almy (1949) who showed motility disturbance in response to a variety of stimuli. However both techniques are tedious and time consuming and cannot demonstrate mucosal changes.

The aim of this work is to look at the upper Gastrointestinal Tract (G.I.T.) through the modern endoscopes in chronic anxiety patients suffering from dyspepsia to find out any objective changes.

PATIENTS AND METHODS

A sample of 25 patients attending the psychiatric outpatient clinic at Ain-Shams University hospital suffering from anxiety neurosis for more than 2 years and presenting mainly with dyspeptic symptoms were studied. Sixteen patients were males and 9 were females with mean age of 25. 58 ± 6.8.

These patients were clinically diagnosed as suffering from anxiety neurosis by a team of senior psychiatrists using the criteria for diagnosis as described in the Egyptian Manual (Egyptian Psychiatric Association, 1975).

Eysenck Personality Inventory (E.P.I.) was applied to 12 cases.

Panendoscopy (oesophago-gastric-duodenoscopy) using Lo Presti F-8 Panendoscope, A.C.M. was performed to all patients after 8 hours fasting and premedication with 10 mg. diazepam i.v.

RESULTS

The Eysenck Personality Inventory was applied to 12 patients, 8 males and 4 females. The results are shown in Table I.

The gastro-intestinal symptoms are summarized in Table II and the panendoscopic findings are shown in Table III.

TABLE I

The Eysenck Personality Inventory.

	Mean ± S.D.	Normal Mean ± S.D.
Neuroticism scale	18.50 ± 2.84	09.65 ± 5.10
Extraversion scale	09.08 ± 3.65	13.12 ± 4.95

TABLE II

Gastrointestinal Symptoms In 25 Chronic Anxiety Patients

No.	Symptoms	No.	Percent
1	Heartburn	25	100
2	Belching	25	100
3	Epigastric Pain and Fullness	22	84
4	Regurgitation	21	88
5	Anorexia	17	68
6	Nausea and Vomiting	13	52
7	Dry Mouth	11	44
8	Feotor	3	12
9	Haematemesis	2	8

TABLE III

Panendoscopic Findings In 25 Chronic Anxiety Patients

Endoscopic Findings	No.	Percent
Physiologic Gastric Mucous	21	48
Duodenogastric Reflux	18	72
Antral Hyperperistalsis	16	64
Pylorospasm	15	60
Oesophagitis	13	52
Antral Gastritis	12	48
Duodenitis	11	44
Mallory - Weiss Syndrome	2	8

DISCUSSION

The physiological changes which accompany the effect of anxiety are widespread and obvious (Wolf and Almy, 1949). Functional gastro - intestinal disorders are the commonest type encountered. Almy (1973) states that inspite of scientific advance of the last 20 years, the causes of many functional gastro - intestinal symptoms are still unrecognized.

In the present study the most frequent endoscopic finding was increased physiologic gastric mucus in 84 %. To our knowledge, this finding has not yet been reported. It may be explained by frequent

swallowing of saliva experienced by anxious patients in an attempt to moisten the dry mouth leading to accumulation of mucus in the stomach.

Normally the human pylorus has a zone of high pressure that relaxes with central peristalsis and contracts with endogenous exogenous hormonal stimulation, thus controlling the retrograde flow of the duodenal contents into the stomach (Fisher and Cohen, 1973). According to Johnson (1972), one of the possible factors which favour reflux is a single large duodenal contraction not linked to an antral contraction. Abbot and co - workers (1952) recorded exaggerated unremitting contraction in the descending duodenum in individuals with nervous vomiting. Anderson and Boyce (1974) reported Duodeno-Gastric Reflux (D.G.R.) in irritable bowel syndrome. The D.G.R. was encountered in 72 % of our cases which may be explained by disordered motor activity of the pyloroduodenal segment.

Antral hyperperistalsis was reported in 64 % of the cases and pylorospasm in 58 %. These endoscopic findings could be explained by over activity of the para - sympathetic nervous system (Lader, 1975).

Gastritis was found in 48 % of our cases. This may be secondary to reflux of bile into the stomach, thus breaking the mucosal barrier to hydrogen diffusion (Johnson, 1972). In addition, gastric hypersecretion as a result of parasympathetic over activity has been reported in chronic anxiety (Grossman, 1958).

Oesophagitis was encountered in 52 % of our cases. It usually develops as a consequence of escape of both gastric and duodenal contents into the oesophagus resulting in oesophagitis.

Epigastric pain and fullness were reported in 88 % of our cases. This may be explained by the endoscopic findings of antral hyperperistalsis and prolonged pylorospasm as well as increased gastric distension following interaction between gastric hydrochloric acid and bicarbonate - rich swallowed saliva and regurgitated duodenal contents with release CO 2 (El - Zayadi et al., 1979). In addition, these anxious patients swallow air unavoidably during drinking or eating, thus perpetuating further the sense of fullness (Sleisenger, 1973).

Belching, a symptom or airophagia was reported in all our cases in attempt to relieve gastric distension. This could be explained by increased gastric distension as a sequence of unavoidable air swallowing in anxious patients. And they also swollow air voluntarily to induce temporary relief through eructation. In addition to the increased production of gastric CO 2 as mentioned above.

Regurgitation was reported in 84 % of our cases which may be explained by retropulsion of the gastric contents through the oesophagus into the mouth as a result of retroperistalsis. Two of our patients presented with haematemesis due to tear of the oesophagogastric mucosal junction (Mallory - Weiss Syndrome) resulting from forceful repeated vomiting.

In **conclusion** : chronic anxiety patients usually present with dyspeptic symptoms which could be demonstrated objectively by the modern fibreoptic endoscopes. The main endoscopic findings reported were increased physiologic mucus, duodeno - gastric reflux, gastro-oesphageal reflux, antral hyperperistalsis, and prolonged pylorospasm. These findings could be explained by motor disturbances of the gastro - intestinal tract.

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AUTHORS

A. El-Zayadi, M. D. (medicine) Assistant Professor of Medicine, Ain Shams University Cairo

A. Sadek, M. D., M. R. C. Psych., D. P. M. & N., Assistant Professor of Psychiatry.

F. Lotaif, M. R. C. Psych., D. P. M. & N., Assistant Professor of Psychiatry.

Zeinab Bishry, M. D., D. P. M. & N., Assistant Professor of Psychiatry.

Department of Psychiatry, Ain Shams University Cairo.

الموجـــــز

التغيرات المشاهدة بالمنظار الداخلى (الشامل) فى مرض القلق المزمن

لقد أجريت هذه الدراسة على عينة تتكون من خمس وعشرين مريضا بالقلق المزمن ويعانون من سوء الهضم ، وقد تم فحص كل هذه الحالات بالمنظار الداخلى ، وفحص اثنى عشر منهم سيكولوجيا ، وقد أوضح اختبار ايزنك للشخصية أن مرضانا عصابيون أكثر من كونهم انطوائيون . واوضح الفحص بالمنظار الداخلى وجود مخاط فسيولوجى معدى زائد (٨٤ ٪) ، ارتجـــاع من الاثنى عشر الى المعـــدة (٧٢٪) ، وحركة دودية زائدة فى المنطقة المجـــــاورة للبواب (٦٤ ٪) ، انقباض فى الجزء البوابى (٦٠ ٪) وتغيرات التهابية فى المرىء (٥٢٪) والمعدة (٤٨٪) والاثنى عشر (٤٤٪) . ولقد فسرت كل تلك التغيرات كنتيجة ثانوية لاضطرابات حركية فى القناة الهضمية .

ABSTRAIT

Les Changements Endoscopiques chez les Malades Souffrant d'une Anxiété Chronique.

Vingt-cinq malades chroniques souffrant de dyspepsie ont été sujets de cette étude. Tous les cas ont été examinés du point de vue endoscopique et douze parmi eux du point de vue psychologique. L' Eysenck Personality Inventory a rapporté que nos patients étaient plutôt des névrosés que des introverts. L'endoscopie a montré une augmentation du mucus gastrique et physiologique (84 %) du reflux duodenogastrique (74 %) hyperperistalse dans la région adjacente au pylorus (64 %) spasme du pylorus (60 %) et des changements inflammatoires dans l'oesophage (52 %) l'estomac (48 %) et le duodenum (44 %) .Tous ces changements ont été expliqués comme étant secondaires aux troubles moteurs du tube digestif.

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Psychiatric Disorders in Primary School Children

By : O. El-Sherbini, Samia Abdel-Rahman, and Y. Abdel-Mohsen

ABSTRACT

This work was done to study psychiatric disorders in primary school children and to investigate the personal history and family characteristics of the affected children. To achieve this purpose we selected three primary schools in Tanta city, representing different socio-economic strata.

The school social workers and the class-room teachers were informed about the manifestations of psychiatric disorders in primary school children and referred these cases for psychiatric examination. The psychiatrist attended each school once weekly during the scholastic year 1979/1980. The parents of the affected children were likewise interviewed.

The total number of children in the three schools was 1500. Psychiatric disorders as confirmed and diagnosed by the psychiatrist were present in 10 ·/. of cases. Behaviour disorders were the commonest type of psychiatric disorders present while habit disorders occurred less frequently. The personal history of the affected children showed that 50 ·/. of them were the youngest as regards their birth order and that neurotic traits in early childhood were present in 76.6 ·/. of them. Study of the family characteristics showed severe parental conflicts in 26.6 ·/. of cases. Over-protective parents were more than aggressive parents. Psychiatric disturbances in siblings were reported in 50 ·/. of cases.

INTRODUCTION :

Epidemiological studies of school age children were undertaken by various authors. Rutter and Graham (1966) found that excluding educational disorders, mental retardation and some monosymptomatic disorders such as enuresis, a minimum prevalence rate of 6.5 per. cent was obtained for psychiatric disorders among 10 — and 11 — year old children. Bower et al. (1960) note that at least 3 children in