

What is indigestion?¹

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Summary: Ninety patients and 30 senior hospital doctors were questioned about indigestion and dyspepsia. There were marked discrepancies between the views of patients and doctors. Most doctors considered indigestion to be synonymous with dyspepsia and associated it with peptic ulcer. Patients, however, were not generally conversant with the term dyspepsia and linked indigestion with psychological factors, feeding patterns and bowel function rather than physical illness. The patients' concept of indigestion corresponded closely with medically-accepted features of irritable bowel syndrome. Uncritical use of these terms may lead to misinterpretation of the patient's complaint and inappropriate management.

Introduction

The term indigestion is familiar to all. It is usual for a patient to complain of this specifically rather than to list his symptoms, and the term is commonly used in hospital referral letters from general practitioners. Unfortunately, indigestion has no absolute definition and hence without detailed questioning the doctor is likely to give his own interpretation of this vague symptom complex. The patient's and doctor's views may or may not coincide. The medical profession has tried to be more precise in its approach by using the term dyspepsia. However, there is uncertainty as to whether indigestion and dyspepsia are synonymous. Moreover, despite its quasi-scientific ring, dyspepsia, too, lacks firm definition. The disparate views on this subject in current textbooks of gastroenterology do little to settle the confusion. We have therefore conducted a survey amongst patients and doctors to find out what differences may exist in their interpretation of indigestion and dyspepsia.

Patients and methods

Four groups of 30 subjects were interviewed. The groups selected were: A, patients with active symptomatic peptic ulcer; B, patients without any gastrointestinal complaints; C, patients with organic gastrointestinal disorders other than peptic ulcer disease (in the main inflammatory bowel disease); and D, hospital general physicians and surgeons of senior registrar or consultant status. Both inpatients and outpatients were included. The interviews were conducted in private, each lasting about 20 minutes, and were recorded on a questionnaire by the interviewer. The questions were designed to find out what was believed and understood about the condition in general in terms of symptoms, causes, associations and remedies. If the subject was an 'indigestion' sufferer, this of course coloured his views; but it was explained at the interview that we wanted his general opinion about indigestion rather than just an account of his own symptoms.

The initial questions ascertained if and how often the subject suffered indigestion, whether indigestion and dyspepsia were considered synonymous, and broadly what the symptoms of both disorders included. These general headings were: pain, wind, acidity, sickness and bowel upset. The interview was then confined to indigestion rather than dyspepsia and more detailed questions were asked about symptoms, the possible causes, association with food,

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relieving factors, links with other conditions and remedies. There were 113 questions in total, each requiring a 'yes'/'no' or 'don't know' response.

Results

The results are presented in the following way: The numbers in each group responding to a particular question are given in parentheses. Reference in the text to subjects means groups A, B, C and D. Reference to patients means groups A, B and C. Reference to doctors means group D only.

Most subjects admitted to being indigestion sufferers (100 out of 120). Those with peptic ulcer were more likely to suffer often (more than once a month) than the other groups (A 23, B 5, C 10, D 5). About half of the patients did not know what dyspepsia was (A 15, B 11, C 18), though only one doctor claimed ignorance. Of those patients who understood the term dyspepsia, opinion was divided roughly equally between those who thought it the same and different from indigestion. Of the doctors, 24 of 29 who understood the term used it synonymously with indigestion.

Under the broad symptom headings almost all subjects included pain, and most included wind, acidity and sickness. Somewhat surprisingly, a high proportion also included bowel upset in some form or another. The more detailed questions revealed that although pain was predominantly considered to be in the upper abdomen and chest, many patients considered lower abdominal pain (A 18, B 16, C 13), back pain (A 17, B 11, C 14) and headache (A 15, B 11, C 13) to be part of indigestion. Even rectal pain was included by some patients (A 9, B 4, C 6). Doctors were more conservative in their acceptance of pain in sites other than the upper abdomen and chest, with 10,7,5, and nil recording pain in the lower abdomen, back, head and rectum, respectively.

The consensus from all groups was that indigestion pain is usually mild (A 22, B 22, C 26, D 30) but not infrequently severe (A 11, B 5, C 11, D 18), usually lasts less than 1 hour and rarely more than four, and is generally burning or aching in character. Nonetheless, a substantial proportion thought the pain could last a day or more (A 12, B 6, C 9, D 11) and almost half considered indigestion pain to be typically colic (A 16, B 15, C 14, D 10).

One of the most unexpected results of the survey was the extent to which bowel upset was considered part of indigestion. The majority reported irregularity of bowel actions as an associated feature (A 22, B 17, C 16, D 15). Constipation (A 19, B 12, C 15, D 8) appeared to be commoner than diarrhoea (A 18, B 4, C 8, D 9). The more frequent reporting of bowel upset in the peptic ulcer group may reflect the effect of antacid treatment. Changes of stool colour (A 17, B 9, C 16, D 8), form – i.e. ribbons, rabbit pellets or loose (A 23, B 18, C 20, D 11), and smell (A 17, B 13, C 9, D 4) were often mentioned. About a third specifically mentioned the presence of undigested food in the stool as a typical feature (A 11, B 9, C 10, D 7). Mucus, slime or blood in the stool seemed rare (A 5, B 2, C 3, D 3).

Wind of all descriptions was a predominant feature, with almost all acknowledging belching (A 29, B 28, C 27, D 28) and borborygmus (A 26, B 21, C 20, D 23). Patients were much more inclined than doctors to accept flatus as part of indigestion (A 25, B 23, C 21, D 11).

Heartburn (A 28, B 23, C 24, D 27) and acid regurgitation (A 23, B 24, C 27, D 27) were equally common in all groups. Nausea (A 26, B 21, C 23, D 27) and even vomiting (A 21, B 15, C 21, D 22) were remarkably frequent, as were the less easily defined symptoms of abdominal heaviness (A 25, B 22, C 23, D 23) and distension (A 25, B 22, C 25, D 20).

Factors considered important by all groups in the causation of indigestion included heavy or irregular meals (A 26, B 26, C 29, D 29) and alcohol (A 22, B 18, C 16, D 27). Doctors were much more likely than patients to incriminate smoking (A 10, B 14, C 8, D 26). Around half of those questioned volunteered that specific foods caused indigestion, the principal offenders being spicy and fatty foods, onions and cucumber.

In regard to factors which might relieve indigestion, most patients felt that belching (A 27, B 30, C 26), passing flatus (A 24, B 23, C 19) and opening the bowels (A 29, B 27, C 28) were

the most helpful. Although doctors supported relief by belching (25), they were unimpressed with relief by passing flatus (5) or defaecation (6).

In terms of remedies, antacids were almost universally agreed to be helpful (A 27, B 27, C 28, D 30), but doctors appeared to be more convinced than patients of the benefit of milk (A 18, B 17, C 14, D 30). On the other hand, many more patients than doctors considered laxatives to be of use (A 13, B 14, C 16, D 4). Other remedies given some support were simple analgesics such as aspirin and paracetamol (A 11, B 10, C 10, D 14), tranquilizers (A 11, B 13, C 14, D 18) and even antibiotics (A 7, B 7, C 6, D 1). Doctors advocated bed rest much more readily than patients (A 14, B 8, C 11, D 26).

There were a number of discrepancies between patients and doctors concerning disorders possibly associated with indigestion. Most subjects associated indigestion with worry (A 25, B 26, C 22, D 27), depression (A 19, B 18, C 17, D 17), modern living and overwork (A 25, B 24, C 23, D 23), and many with gastroenteritis or colitis (A 15, B 22, C 18, D 14). However, patients were less likely than doctors to link indigestion with peptic ulcer (A 14, B 18, C 20, D 30), hiatus hernia (A 10, B 11, C 8, D 27) and stomach cancer (A 7, B 10, C 6, D 23), but more likely than doctors to associate it with constipation (A 25, B 19, C 20, D 7) and poor diet (A 24, B 24, C 27, D 14).

Discussion

While some of the information provided by this survey is predictable, there is much that is surprising and some gives cause for concern. Of the more predictable results, those worthy of note are that indigestion is extremely common, that patients are not conversant with the term dyspepsia and that patients link indigestion more with psychological factors, feeding patterns and bowel function than physical illness.

One of the main points to emerge is that as far as patients are concerned indigestion is not a disorder confined to the upper gastrointestinal tract. Symptoms, causes, remedies and associations accepted by patients show that what they understand by indigestion overlaps considerably with the irritable bowel syndrome. It is interesting that there were very few differences between the views of ulcer and non-ulcer patients, which suggests that those with peptic ulcers suffer both the specific symptoms from their ulcer and in addition the rather nondescript symptoms suffered by so many of the general population and loosely termed indigestion. It appears, too, that ulcer sufferers have difficulty in distinguishing these two sets of symptoms.

Most general physicians and surgeons, on the other hand, use the terms indigestion and dyspepsia synonymously and tend to equate them with peptic ulcer. Perhaps the most disturbing feature is the potential for inappropriate investigations, advice and therapy engendered by the discrepant views of patient and doctor. On the patient's side, indigestion is unlikely to be caused by peptic ulcer, is often stress-related, is usually a form of functional bowel disease and may well respond to laxatives. The doctor, however, associates indigestion with peptic ulceration and, unless the situation is clarified, investigates it by barium meal or gastroscopy and tries to treat it by an assault on gastric acid. The gratifying response to antacids is probably as much a result of their effect on bowel function as their acid-neutralizing properties. It is of note that by far the most popular 'antacid' in our survey was Milk of Magnesia.

Although the survey was not designed to assess medical knowledge, it became evident that many senior doctors have misconceptions about the symptoms and associations of peptic ulcer. The problems of disease concept and of medical terminology, particularly where both colloquial and medical usages exist, have recently been discussed by Campbell *et al.* (1979). The findings from our survey lend weight to the arguments of those who are concerned with communication and definition in medicine (*British Medical Journal* 1979). Our suspicion that the terms indigestion and dyspepsia are too vague to be of value seems to have been amply borne out. We could perhaps go further and say that they may be positively misleading and result in inappropriate management. Although many gastroenterologists agree that these terms are ill-defined and confusing, it is worrying to see that they are still

widely used in medical practice. In popular gastroenterology textbooks (Sleisenger & Fordtran 1978, Tonkin & Parrish 1968, Truelove & Reynell 1972, Jones *et al.* 1968), from both sides of the Atlantic, indigestion and dyspepsia are used variously to describe the symptoms of almost every disorder of the digestive system as well as a range of non-digestive diseases from brain cancer to heart failure.

We suggest that these words, though perhaps useful as blanket terms when talking to patients, should not be used in clinical notes, books or journals unless critically defined.

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