

## MEDICAL PRACTICE

*Clinical Topics***How to take a history of head or facial pain**

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**Abstract**

A sequence of 15 questions is used to analyse pain, headache and facial pain being used for illustration. The questions are grouped for ease of memory—time, site, influencing and other factors—and arranged in such an order that simple questions are posed first.

**Introduction**

Symptoms without signs is the way most patients present for diagnosis in general or in hospital practice. Even a little experience teaches us that all too often no special investigation provides a diagnosis. Yet the tyro asks for tests to exclude (“rule out”) various possibilities, which can tell only what is *not* the diagnosis and not what is.

It follows that unless we make a positive diagnosis from the analysis of the main symptom(s), usually pain, the rest of our diagnostic armamentarium is of little or no help. To squeeze everything out of the history therefore becomes imperative. But it is apparent from presentations of case histories that even well-qualified aspiring young doctors have not considered the problem. Inadequate symptom analysis leads to failure in diagnosis, inappropriate investigation and treatment, and, ultimately, to the dissatisfaction of the patient as well as the doctor.

Ryle's<sup>1</sup> classic analysis of pain in 1936 delineated 11 questions which remain standard teaching today.<sup>2,3</sup> But undergraduate and postgraduate doctors have difficulty in recalling 11 seemingly unconnected questions. I have therefore formulated a scheme

in which 15 questions are grouped—time, site, influencing factors and other characteristics—in a sequence that can also be expressed visually (fig 1).

Timing	Onset	Frequency	Duration
Site	Where starts	How travels	Deep or superficial
Influencing factors	Precipitating →	↓ Aggravating	↑ Relief
Description of pain	Quality	Quantity	Associated symptoms
Present position	Past treatment	Patient's ideas	Why now ?

FIG 1—Grouping of questions for ease of memory.

**Opening gambit**

Simple words provide clarity, essential for communication, a lesson brought home when translation into another language is necessary. Further, the opening question by the doctor can set the tone of the whole consultation: to start with “Of what do you complain?” may leave the patient gasping with incomprehension, not the best beginning for rapport. Whereas “Tell me what is troubling you” or “Tell me about your headaches” (assuming that is known from the referring doctor's letter), or better still, “How can I help you?” gives the patient the opportunity to say what he or she has planned or previously rehearsed. The subsequent spontaneous remarks must be carefully noted because it is distressing to the patient to be asked a question on a point he volunteered earlier—that is, the doctor was not listening.

**Taking the history**

Although we are correctly taught not to ask leading questions, students often fail to appreciate the difference between a leading and direct question; each may be required. The patient needs his attention and replies directed to the problem under consideration—one has to *take* the history. Even so patients often fail to answer a specific query, which is only uselessly repeated in the same words but even louder.

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Yet a different turn of phrase or another approach may evoke the relevant reply, hence I have included some alternatives below. If there are attacks of pain these two words are interchangeable.

## The 15 questions

### THREE QUESTIONS DEALING WITH "TIME"

(1) *Onset*—"When did you have this pain for the first time?" or "How old were you when you first had the pain?" You may need to proffer school days, late teens, 20s, etc.

(2) *Frequency*—"How often does the pain occur?" There may be a pattern as in migrainous neuralgia that awakens the patient in the early morning hours or migraine that begins at weekends or premenstrually. If there is no clear periodicity then, "What are the longest and shortest periods of freedom between attacks?" and then the average duration of freedom can usually be estimated by the patient.

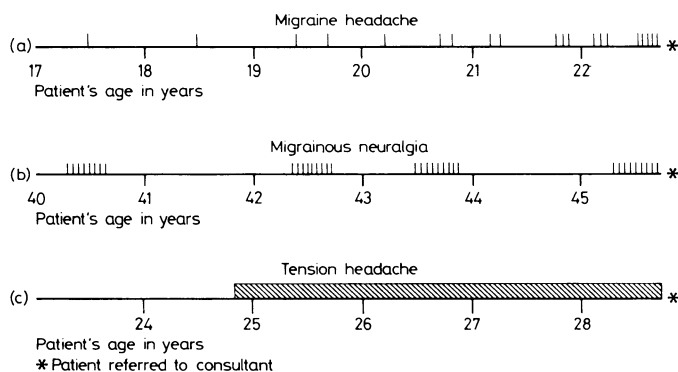


FIG 2—Chronological patterns of different headaches.

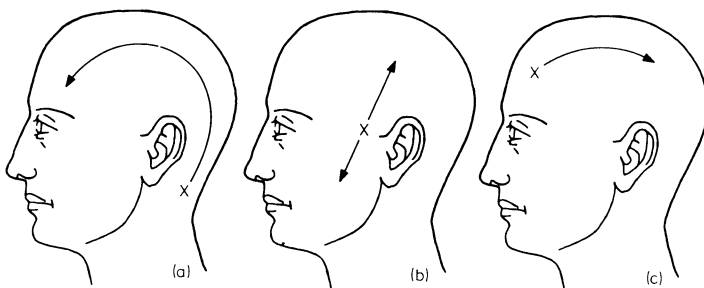


FIG 3—Distribution of pain: (a) upper cervical spine, (b) temporomandibular joint, (c) insertion of the temporalis muscle.

(3) *Duration*—"How long does the pain last?" If necessary the patient will usually be able to select from seconds, minutes, hours, or half or a whole day. In those instances where there is variation, the longest, shortest, and average duration of the attack is again pursued.

At this stage it should be possible to draw a graph indicating, for example, the increasing frequency of migraine attacks that made the patient seek medical advice (fig 2a), the cluster of migrainous neuralgia that spans several weeks (fig 2b), or the unremitting, unvarying pain characteristic of tension headaches (fig 2c).

### THREE QUESTIONS DEALING WITH THE "SITE" OF THE PAIN

(4) "Where does the pain start?"

(5) "How does it travel?" "Does it move around?" If so, "Where?"

Often the sufferer will show pain distribution with a finger. Graphic representation can indicate the anatomical localisation—for example, the temporomandibular joint (fig 3b) or the insertion of the temporalis muscle (fig 3c). If the pain remains in one spot then only one of these questions is applicable.

(6) "Is the pain deep as in a bellyache or superficial as when something is digging into your skin?" Migraine headache is commonly deep seated.

### THREE "ARROW" QUESTIONS

(7) → p "What brings on the pain?" Thus touching or washing the trigger zone precipitates the lancinating pain of trigeminal neuralgia. The provoking factors or circumstances before a migraine may be avoidable and valuable in prophylaxis.<sup>4</sup>

(8) ↓ a "Can anything aggravate, increase, or make the pain worse?" Cough or jolt accentuation suggests an intracranial component of a headache whereas accentuation by movement in certain directions indicates a musculoskeletal element.

(9) ↑ r "What have you tried to relieve or reduce your pain?" If analgesics have been tried it is necessary to check that enough has been consumed: often only one aspirin has been taken. Secondly, relief should come within the time of drug absorption, 20-30 minutes, unless tablets are taken after a meal or the patient is appreciably nauseated.

### TWO "Q" QUESTIONS

(10) *Quality*—"What is the pain like?" This is the most difficult of all the questions, comparable to being asked to describe a piece of music or the taste of a banana. If patients proceed to describe the severity of their pain—and they do—it is helpful to offer, "Is it aching, burning, gripping, throbbing, stabbing, twisting, turning?" in the same tone of voice, taking care not to emphasise one adjective more than another. A mixture of pains may be present; in migraine, for example, an ache predominates most of the time changing to a throbbing quality with movement or exercise. You have to accept that some patients cannot describe the pain quality.

(11) *Quantity*—"How bad is the pain?" Pain severity can be assessed only by its effect on daily activities—appetite, weight, sleep, watching television, or other pastimes. "How has the pain affected your life?" can also disclose symptoms of anxiety or depression that need separate evaluation. A pain that takes a patient to bed is usually severe, particularly in children.

(12) *Associated symptoms*—"Do you notice anything else when you are in pain?" Here leading questions may be required. For example, changes in one eye and the ipsilateral nostril in migrainous neuralgia, facial colour and appetite during a migraine headache, clicking jaw or bruxism in temporomandibular joint dysfunction. Trigeminal neuralgia provokes grimacing (tic); with migraine headache patients lie still whereas with migrainous neuralgia they pace the room or hold the head.

The manner of the response determines their importance and suggests, to me at least, that questionnaires or computers are unlikely to replace sensitive clinicians.

If you do have to ask leading questions try to make the patient negate the expected reply. For example, in migraine "Does your face go red?" and the reply "Oh no, I go pale or yellow" is of greater importance than concurrence.

(13) *Previous treatment*—It may be difficult but it is worth while trying to find out the name of "the small white tablets" that have been given, if only to prevent prescribing again previously unhelpful treatment. As pointed out, it is important to ensure that the drugs have been taken in therapeutic amounts. "Did the tablets agree with you?" will establish untoward side effects.

(14) *The patient's own ideas*—"What do you think caused your pain?" or "What thoughts have crossed your mind about your pain?" Pain, particularly in the head, can provoke intense fear of serious disease. Even at this point in the interview the subject may be reluctant to voice his anxieties and you must be especially wary and unhurried. It is useless reassuring the patient that he does not have a cerebral tumour when he arrived with anxiety of a stroke—he leaves with two fears!

(15) *Why now?* This question may not be relevant, and will then not be asked. But if the patient has had migraine for many years, for example, it can be rewarding to inquire "What made you go to the doctor at this stage?" A particularly severe attack, an attack of status migrainosus, a change of headache pattern, a different type of headache, fear of a cerebral haemorrhage or tumour, intercurrent depression, hearing of a new line of treatment or other considerations make the patient come to hospital after tolerating or coping with the condition previously.

## Discussion

As an aide-memoire you can teach students to group their inquiries into history (time 3), geography (site 3), science (arrows 3), Q questions (2), and the remainder readily fall into place. In this way the easier facts are ascertained first and you have established good rapport before crossing the difficult hurdles of the quality and severity of the pain. Furthermore, the analysis of the main symptom may be completed in a matter of minutes and you can arrive at a diagnosis—firm, provisional, or tentative—at the initial consultation. You still have to complete the full history taking and examine the patient from top to toes to establish “normality.”

Systematic action is the basis of all daily activities be it dressing, driving a car or, in medicine, examining the cardiovascular system, for example. I therefore propose this order for history taking of any episodic pain or attack, although the scheme may be modified to suit the individual doctor or patient, especially when the latter wishes to discuss one or more aspects first.

Diagnosis is often considered a deductive process. Equally valid scientifically is recognition of the pattern comparable with building a picture that evolves like a jigsaw puzzle. At times a

patient cannot answer all the questions but, continuing the pictorial analogy, we can recognise a painting by Renoir or Rembrandt without necessarily seeing the whole canvas.

Finally, what do you do when a diagnosis cannot be reached at the first visit? The patient can be requested to keep a record of symptoms in a tabular form with which the diagnosis can be reviewed at the next attendance. At times, in a condition such as trigeminal neuralgia, a therapeutic response to carbamazepine can aid the diagnosis. Again, with frequent attacks admitting the patient to hospital for a few days for observation by residents and nurses during an attack can be illuminating and diagnostic.

## References

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# Death from asthma in two regions of England

BRITISH THORACIC ASSOCIATION

## Abstract

The British Thoracic Association has conducted a confidential inquiry into death from asthma of adults aged 15 to 64 years resident in the West Midland and Mersey regions in 1979. Information concerning the patients, their asthma, and death was obtained by questionnaire, interview with the general medical practitioner and a relative, and from patient records. A panel of three physicians, helped by a pathologist, identified 90 patients as dying of asthma and assessed management and treatment in the last year, last month of life, and the fatal attack. They were generally chronic asthmatics, but unstable, most having suffered severe attacks previously. Corticosteroids and bronchodilator drugs were in general underprescribed or not given in sufficiently large doses. Inhaled corticosteroids and cromoglycate had frequently not been tried. The patient's co-operation with the management of the asthma was satisfactory for only 42 of the 90 patients. For 71 of the patients the fatal attack lasted under 24 hours; of the 77 who died at home or at work, 50 did not receive any medical attention in the fatal attack. Failure to recognise the severity of the asthma by patients, relatives, and

doctor often caused delay in starting appropriate treatment. The interaction of several of these adverse factors often contributed to the patient's death. The panel considered that there were potentially preventable factors contributory to the death of 77 (86%) of the 90 patients. Within the limits of retrospective judgment the panel considered that the routine management of the asthma was often unsatisfactory as patients known to suffer severe acute attacks were often not adequately supervised or instructed in the management and treatment of their asthma. From this retrospective inquiry we concluded that closer overall supervision, including careful attention to patient education, earlier and more intensive treatment, and pre-arranged immediate admission to hospital for asthma emergencies is desirable.

## Introduction

Modern treatment has produced little reduction of mortality from asthma, and this is especially so in young people in England and Wales.<sup>1</sup> Overtreatment, especially with bronchodilators, has often been blamed for some deaths from asthma,<sup>2-4</sup> but subsequent studies examining the circumstances of death have usually found undertreatment more important.<sup>5-6</sup> Cochrane and Clark<sup>6</sup> suggested that an inquiry into death from asthma, similar to the confidential inquiry into maternal deaths, was required to provide more information and to identify preventable factors. We report such an inquiry conducted by the British Thoracic Association in the West Midland and Mersey regions of England during 1979. The objects were to identify the characteristics and the pattern of illness of those who had died from asthma and to study the management and treatment of their disease in an attempt to ascertain factors associated with death.

The inquiry was carried out by a subcommittee of the research committee. The members were: *Chairman*: Dr E A Hills to April 1980, Dr A R Somner from April 1980. *Members*: Dr A M Adelstein (Office of Population Censuses and Surveys), Sir Cyril Clarke (Medical Services Study Group of the Royal College of Physicians); Professor T J H Clark, Dr M S Dunnill, Dr A J Johnson, Mr A J Nunn (statistician, MRC Tuberculosis and Chest Diseases Unit), Dr D E Stableforth, Professor A G W Whitfield (Medical Services Study Group of the Royal College of Physicians), Dr C J Stewart (co-ordinator).