PRACTICE OBSERVED

Beyond the Surgery

General practitioner and his music festival

IAN TAIT

The music festival has always been an important and enjoyable element in my life as a general practitioner in Aldeburgh. The surgery is marked on the tasteful map of useful places that can be found in the festival programme each year, and we like to feel that the service we provide will complement the other good things provided by the town in its role as host to the artists and visitors who attend the festival.

The East Anglian spring is a long, grey wait for sun and warmth, and the festival comes just at the time when a welcome generosity of mood returns to our world. You can even lie on the grass without being frozen by the east wind. The broom and the wild lupins are at their best, and field poppies begin to splash the roadside with red. Every festival has some great hot days and star-filled nights that live in our memory long after we have forgotten the rather more numerous grey days. All in all, the festival is a good time to sweep away the winter and to start to live for summer. The festival organisers certainly feel this, and open-air events are arranged with regal confidence. Which reminds me that Queen Victoria's great defiant answer to some wailing willie of a courtier—"There is no depression in this house and we are not interested in the possibility of defeat"—would stand as a good motto for those great hearts who created and maintained the festival. All the same I think the audiences must have been tougher in those very early days—they were certainly younger! What was it really like, I wonder, to listen to madrigals played from punts on Thorpeness Meare while the evening grew greyer and a 15-knot north-east wind kept the girls busy trying to control their hair-do, the hems of their dresses, and stopping their programmes blowing into the water all at the same time?

There is no official doctor to the festival, rather it seems right that the artists and visitors should become part of the practice, which is, of course, exactly what they do. Indeed, so easily do they do this that one is sometimes false-footed. More than once I have been right through the consultation, observing, yet not quite digesting the name on the temporary resident form, only to recognise rather later than one would have wished for one's comfort, that I was confronting an international celebrity whose identity had somehow been camouflaged by our everyday surgery routines and the quiet modesty of their manner.

Not all our artistic visitors are so muted in style. I well remember my first meeting with a heavily-built singer who arrived in morning surgery when I was still quite new in the town. He demanded some treatment for his throat condition, which he declared had resulted in a poor review of his performance the night before. I peered rather anxiously into the vast cavern of that throat, which appeared impressive only for the size of his uvula. I recalled my teacher's words that when a diagnosis is difficult the answer nearly always lies in the history. I struggled to take such a revealing history, but the problem he was talking about I did not understand. "Well, listen," he said, and out of his huge frame came a high, wailing, countertenor note of a loudness and perfection that only that man could have produced. As it died away I could hear the laughter from the reception area outside my door. I felt my honour in the practice to be at stake. I looked down at my desk and saw salvation in the shape of an impressive looking Tyrozet spray that I had been unable to dissuade a drug representative from leaving with me the day before. Seizing this instrument I said, "Make that noise exactly as before." As he did so I gave him the full force of that Tyrozet spray straight on to the magnificent, vibrating uvula. He sang beautifully for the rest of the festival.

It sometimes seems that it is not what you do in general practice, but rather the mere fact that you are there and that you are trusted that renders to our patients our greatest service. In much the same way a doctor's contribution to the festival is of this nature. If the worst should happen, and who knows

Aldeburgh, Suffolk
IAN TAIT, MB, FRCGP, general practitioner

Mrs A Pearce Age 50 Occupation: housewife Married, no children	2 years ago 8 months ago 7 months ago 1 month ago Now	backache, NAD C/o headache sore throat anxious Rx Librium 10 mg nocte still worried poor eater Rx Librium repeat Vitavel C/o headache BP 135/85 ? high-rise syndrome Rx amitriptyline 25 mg tid C/o irritability and tiredness headaches dry mouth discomfort on micturition o e no abnormal physical signs
Mr G Hay Age 58 Occupation: storeman Married	7 years ago 1 year ago 6 months ago Now	angina ECG: normal at rest gross ST depression on effort controlled on beta-blockers pain on micturition UTI, protein + recurrence of UTI protein + + micro: occasional RBC Rx methenamine hippurate 1g bid weight increase "about 7 lb" not eating more some dyspepsia breathless on exertion angina: no increase
Miss Mary Jane Dee Age 28 Occupation: schoolteacher	2 years ago 3 months ago Now	influenza vaginitis Rx Flagyl Compak 1 vag insert bid 7 days C/o lassitude ? weight loss no abnormal physical signs

NAD = no abnormality detected. Rx = treatment. Librium = chlordiazepoxide. Nocte = at night. BP = blood pressure. TID = three times a day. o e = on examination. ECG = electrocardiogram. UTI = urinary tract infection. RBC = red blood count. BID = twice daily. Flagyl. Compact = metronidazole tablets and nystatin inserts. C/o = complaining of.

As regards Mrs Pearce, the dryness of her mouth might be a side effect of amitriptyline—or it could be a manifestation of thirst due to diabetes. Her discomfort on micturition could be the result of vulvitis. But she is in fact a diabetic who has been undiagnosed for a long time.

Mr Hay's cardiovascular condition may be an effect of diabetes, as might his weight increase. But in fact he has hypertension secondary to renal disease.

Miss Dee is a type-I diabetic.

Diabetes: a thumbnail sketch

Diabetes is characterised by chronic hyperglycaemia due to either a deficiency or a diminished effectiveness of insulin. There is no cure. It affects the metabolism of carbohydrates, protein, fats, water, and electrolytes. The best broad classification (table) we have is: type I (often called juvenile-onset diabetes) usually develops under 40 and the patient is of normal or less than normal weight. Giving insulin is necessary for survival—hence this type is also called insulin-dependent diabetes mellitus. Type II (maturity-onset diabetes) usually occurs in middle-aged or elderly people; they are often obese and their hyperglycaemia can usually be controlled by diet with or without an oral hypoglycaemic drug—hence non-insulin-dependent diabetes mellitus. By far the greatest number of diabetics are in this category.

Classification of diabetes mellitus

	Type I insulin dependent diabetes mellitus	Type II non-insulin dependent diabetes mellitus
Age of onset	Usually children and young adults	Middle-aged and elderly
Rate of onset	Usually weeks	Months or years
Symptoms	Present	Often absent
Nutritional state	Normal	Often obese
Weight loss	Considerable	Often absent or minimal
Ketosis and coma	Common	Rarer
Response to insulin	Sensitive	Relatively insensitive
Plasma insulin	Absent or low	Usually normal
Response to oral agents	None	Usually good
Predominant vascular disease	Microangiopathy	Atherosclerosis

Note: Recognising the two types is important as regards the prognosis and type of treatment. Many patients may not be placed readily in either category at the time of initial diagnosis

It is important to identify to which clinical type a patient belongs since each requires different treatment and has a different prognosis. At the time of initial diagnosis, however, some patients cannot be readily placed in either category—particularly if they are in the age group 30–40—and they need to be observed over a longer period. In many cases there is a first-degree family history of diabetes so it is worth asking questions about their relatives.

Diabetes may lead to a distressing list of complications. Some patients are first discovered when they present with complications, such as failing vision, peripheral vascular disease, or infection of the skin or urinary tract. The commonest single cause of newly registered blindness in the middle-aged is diabetic retinopathy. Diabetics suffer twice the normal rate of myocardial and cerebral infarctions.

Diagnosing diabetes

Diabetes is usually gradual in onset. Even in the younger patient it may take weeks to develop, and the older person may have no symptoms for months or even years. The presenting symptoms in children and young adults are: dry mouth or thirst (because of the polyuria caused by the osmotic diuretic effect of the glucose and ketone bodies); secondary nocturnal enuresis (in children); and weakness and weight loss.

In the middle-aged the symptoms may be similar but intermittent and less intense, or they may have unexplained weight loss disproportionate to any reduction in food intake. Pruritus vulvae and balanitis are other presentations; candida spp flourish on the skin and mucous membranes where secretions contain abundant glucose. The diagnosis of diabetes must also be considered when seeing middle-aged patients with a change in their visual acuity, paraesthesiae, or aching calves and muscle cramps.

There are several tests to help confirm the diagnosis, which is virtually certain if glucose and ketone bodies are persistently detected in the urine. Most general practitioners now use some form of diagnostic reagent such as Diastix to detect glycosuria and Ketostix for ketonuria. There are two main points to be wary of. Firstly, in the young a low renal threshold may give rise to glycosuria. The renal threshold rises with age, so in the older age group this is unlikely. Secondly, a problem with old people is that hyperglycaemia may occur without glycosuria, so that older persons should have their urine tested after a meal rather than after fasting. Furthermore, if the suspicion is strong, a negative test for glycosuria should be confirmed by the appropriate blood glucose examination.

The next stage is to measure the plasma glucose concentration. You should not rely on just one result—it may be wrong because of a laboratory error or some unrecognised cause of temporary hyperglycaemia. In the patient with appropriate symptoms a confirmed random plasma glucose concentration above 11·1 mmol/l (200 mg/100 ml) is diagnostic; so is a fasting plasma glucose concentration above 7 mmol/l (126 mg/100 ml).

what that might be, there is someone there to help. Just being around in case of trouble sometimes takes more precise forms. I remember waiting on the edge of the golf course for the Queen Mother to arrive by helicopter, my presence having been required—"just in case." I recall wondering just what kind of accident they had in mind and feeling extremely ill-equipped with only my black bag for company.

The nerve centre of the festival is of course the Red House. The beautiful home of Benjamin Britten and Peter Pears. It can be a wildly busy place at festival time and everyone there is far too concerned with playing or listening to want to be bothered with being ill. Nevertheless, it is a rare festival that does not provide a drama or two requiring medical attention. I have many rich memories of those festival visits, both professional and social, to what I once heard called the court of Benjamin Britten. Not all those memories, however, are so pleasurable, and I still blush to recall the day when I was called to visit a VIP from another country in Europe. He had fractured some ribs and the Elastoplast which had been generously applied to his chest was causing him considerable discomfort. In those days I held the belief that the most comfortable way to remove that kind of dressing was with one decisive pull. I proceeded with confidence to apply my theory. The plaster certainly came away remarkably easily but, to my appalled eye, it seemed to me that a large part of the chest wall had also disappeared. After some agitated cleaning up things were not quite that bad, but it was a nasty moment, and I gave up the quick pull idea from that day on.

There was a quality about the Red House, and its life in those high days which was quite remarkable. It is a time that already seems to have developed those golden hues with which we guild our favourite memories. Perhaps doctors have a special need to redress their memories in this way. The ultimate reason for our involvement is so often to be of some use when anxiety, pain, sickness, and death afflict our patients. Such a diet hardly sounds likely to be a promising basis for happy memories. But I can only say that in the case of the Red House they are so. In the early years my professional and personal relationship with the festival and its central figures was lighthearted enough. In later years serious illness and death cast a heavy shadow of loss and sadness. But, of course, it also meant a special kind of intimacy and a fulfilment of one's role as a personal physician, which after all is the ultimate reason for most of us choosing to work in general practice.

Whatever the difficulties, a festival is a time for happiness and high achievement—and whatever the fates may have brought the Aldeburgh Festival has always come out on top, lifting our spirits and making our lives seem more significant and more colourful. Even before the music has begun we notice the change in the surgery. The surgery sessions are leavened with temporary residents who bring a welcome element of surprise and even youth. The festival is here and the summer lies ahead.

We hope that the festival feels better for having its doctors: we know that the doctors always feel better for having the festival.

Trainees' Corner: Managing Chronic Disease

Diabetes mellitus

I: Diagnosis and initial management

JOHN JARRETT, TOM STEWART, LEONARD ROGERS

This article is the first of three based on an audiovisual presentation made for vocational trainees by the MSD Foundation. Further information about the tape-slide programme on which this series is based is available from the MSD Foundation, Tavistock House, Tavistock Square, London WC1.

These articles deal with diabetes mellitus, but the principles that we hope will emerge may be applied to most aspects of chronic disease and its management. Judging by work load surveys in general practice it appears that about a quarter of all consultations are concerned with chronic disease, which is not usually life-threatening in the short term, but presents the general practitioner with problems that are not always adequately dealt with. There is enough evidence to show that in many cases good management can influence the incidence and the severity of complications. It is the intention of these articles to build on what you already know about diabetes to help provide the basis for good control of your diabetic patients. Diabetes is not a rare disease: diabetics are nearly 2% of the population, and a general practitioner with a list of 2500 will have at least 30 known diabetics in his practice—and he will probably find another 20 if he looks for them. About 10 of his patients will need insulin.

Department of Community Medicine, Guy's Hospital Medical School, London Bridge SE1 9RT
JOHN JARRETT, MA, MD, senior lecturer
Sonning Common, Berkshire
TOM STEWART, BSC, MB, general practitioner
MSD Foundation, Tavistock House, Tavistock Square, London WC1
LEONARD ROGERS, formerly deputy director

Three cases

The diagnosis of diabetes may easily be missed initially. Which of the following three patients, all of whom have common symptoms, do you think might have diabetes? What would make you test for glycosuria? We print the medical record as it might appear before you.

If the findings are equivocal you should arrange for a glucose tolerance test. If the result of this is only marginally abnormal it should be repeated after six to 12 months; although to make things easier for the patient and cheaper for the Health Service you might consider monitoring the fasting plasma glucose at similar intervals.

The blood glucose concentration may easily and quickly be measured in the surgery using a reflectance meter—Eye-tone, Reflomat, or the cheaper Hypocount or Glucochek. Their accuracy is sufficient to monitor effectively a patient's progress and for diagnosis, if the blood glucose is substantially raised. Marginal rises should certainly be checked against the hospital laboratory results.

Initial management

Having confirmed the diagnosis we must consider what to do next. Most patients can be managed well in general practice without recourse to the hospital, but there are some circumstances when the patient should be referred for hospital assessment.

The case of Mary Jane Dee illustrates the point. She is 28 years old and first presented with lassitude and blurring of her vision. On questioning she was found to have lost weight and had been excessively thirsty. Her urine contained both glucose and ketone bodies, and a plasma glucose test confirmed the diagnosis. Should she be referred?

We suggest that the general practitioner's decision to refer her to hospital should be influenced by the answers to these questions. Firstly, is the patient under 30? Secondly, is the patient physically ill? Thirdly, is appreciable ketosis present? Fourthly, is the patient pregnant? If the answer to any of these questions is "yes," we think that it is important to have the patient assessed at a hospital. If the patient is pregnant, the sooner the pregnancy is confirmed and the patient placed under hospital supervision for the best possible control by the obstetrician and physician the better the outcome for mother and baby.

If you do decide to look after the patient yourself, the prognosis is likely to depend not only on the treatment you prescribe but also on the extent to which you can help the patient adjust to a disease that will affect most aspects of her life. Most patients will naturally react to your diagnosis by becoming anxious. The effectiveness of the consultation when you break the news could make all the difference to whether your patient co-operates or not. Providing information is one vital part of the interview. These are some of the ways in which it is usually passed on: the doctor's explanatory notes may be written on an individual, and so more personal, basis; and some general practitioners have recorded their advice on a cassette so that the patient may take it home to listen with his spouse or family, or both.

We expect that the components of most initial interviews are something like this. Firstly, *reassurance*—expressed in a way the patient can understand. Secondly, *information*—what is wrong, what are the symptoms, and what can be done to alleviate them. Thirdly, *instruction*—what is being prescribed and why. And fourthly, *review*—to check that the patient has understood what has been said. Further interviews will certainly be required to consolidate and supplement knowledge and understanding.

The patients referred to in this article are fictitious.

ONE HUNDRED YEARS AGO An inquest was held on Tuesday last, by Dr Diplock, on the body of Miss Angela Wallsworth, aged 33, matron at the Metropolitan and City Police Orphanage at Twickenham, of which we have obtained particulars of great toxicological interest. It appears that she had complained of a cold in the head in the presence of Dr Webster, who remarked that camphor and aconite, in drop doses, were useful in the earlier stages of this complaint. From the evidence of a Miss Daines, who had slept in deceased's room as a guest, it appeared that, before going to bed, deceased took something in a tumbler and water. She also gave Miss Daines some, telling her it was good for a headache. Soon afterwards, Miss Daines felt very restless, and had a strange numbness in her hands and arms; and, finding the deceased in an even worse state, she spoke to her. Deceased said that she felt as if she were swelling, and would get out of bed and ask one of the nurses to give her some coffee. She left the room to do so, and did not return. Miss Daines was herself so ill from the effects of the aconite, of which Miss Wallsworth had given a teaspoonful, that she fainted whilst giving her evidence. Mr Netherclift said that, when called to Miss Wallsworth, between two and three on Sunday morning, she was gasping for breath, with her mouth wide open and her tongue protruding. Her eyes were fixed on vacancy, and the pupils were much dilated. He asked her what she had taken, and she gasped out "Aconite." He administered an emetic of mustard, which induced copious vomiting. Diffusible stimulants, such as ammonia and brandy, were also given. Heat was applied to the extremities and cardiac region. He then administered, at intervals, three subcutaneous injections of from ten to fifteen minims of tincture of digitalis. Galvanism was also applied in the region of the heart. Dr Hamilton Bland was then called in in consultation; and three subcutaneous injections of brandy were given. Frequent inhalations of ammonia were adopted. The patient was then completely insensible, and pulseless. Artificial respiration was maintained, without intermission, for two hours; but, beyond slight reflex action of the laryngeal muscles, there were no symptoms of returning life. The jury found a verdict of "Death by misadventure"; and conveyed, through their foreman, to Mr Netherclift and Dr Hamilton Bland, the following resolution, which had been passed unanimously, "The jury wish to express their high appreciation of the painstaking attention and sustained efforts, so promptly resorted to by the medical gentlemen in attendance on the deceased; and their conviction, that nothing that science or skill could do was left undone in their endeavour to avert the fatal issue." It was understood that the unfortunate lady had taken three teaspoonsful of Fleming's tincture of aconite, from a bottle which she had filled in the dispensary. She survived the fatal dose four hours. There was a marked improvement in the pulse after each injection of digitalis. We understand that Miss Daines is still in a critical condition. (*British Medical Journal*, 1881.)

Clinical Curio: terbelence

The patient sat down with that anxious expression on his face that bodes ill for length for consultation. In his rich Irish brogue he opened the conversation. "It's not meself you know, doctor—it's me wife." The look of sympathy on the doctor's face encouraged him to go on. "She's not herself." The mind of the doctor began to think of housekeeping problems as redundancy pay ran out. Perhaps it was going to be the change. "I have written down what's the matter," was his next remark. The doctor looked at the little bit of paper—"TERBELENCE." It rolled beautifully off the Irish tongue. Again the doctor began to guess about marital problems, the eldest son who had a BA (Hons) and yet could only drive a bus. But the Irishman went on. "She feels it all the time. Would you like to call her? She's in the waiting room." The 10-minute slot seemed hardly adequate to deal with this emergency. The wife was brought in. She walked slowly but in a straight line. The semicirculars seemed all right. She sat down rather heavily, and with a sigh she placed her hand on her heart and muttered, "Terbelence, doctor, awful bad terbelence." Cancer of the heart? Mother died? But the next prompt gave the right lead. "When I walk upstairs my heart gets all terbelent." Examination showed raised blood pressure and auricular fibrillation, but the descriptive phrase "her terbelence" sounded a much better way of describing the onset of cardiac irregularity.—W D A BIRCH, general practitioner, Islip, Oxford.

We will be pleased to consider for publication other interesting clinical observations made in general practice.—ED, *BMJ*.