DEFINING DYSPEPSIA

An interview with Dr Robert Heading, Consultant Gastro-Enterologist, Edinburgh, Scotland

SAFP: It appears that the more we learn about a specific condition, the more complex the problem becomes. Years ago, dyspepsia featured little in our curriculum — the importance focussing on the diagnosis of peptic ulcer disease, oesophageal stricture and carcinoma. Today, the terms of gastro-oesophageal reflux disease, non-ulcer dyspepsia and functional dyspepsia crowd the medical field. We need to clearly define what is meant by functional dyspepsia. Does it include non-ulcer dyspepsia and gastro-oesophageal reflux disease (GORD)? Are these actually different entities?

Dr Heading: The word dyspepsia denotes nothing more than a number of symptoms that may occur concurrently in a patient. It is a variable grouping of symptoms that we have come to associate with an origin — we think — in the upper gastro-intestinal tract. It is nothing more specific than that. Particularly, I would make the point that using that term dyspepsia makes no assumption about the underlying pathology.

Functional dyspepsia, as far as I am concerned, is the occurrence of dyspeptic symptoms for which, after investigation, no underlying cause can be found.

SAFP: Are we able to classify or group the dyspeptic symptoms that would give us some indication as to whether we are dealing with a patient with functional dyspepsia without having to subject the patient to endoscopy?

Dr Heading: Unfortunately the harsh truth is that the evidence says you cannot do that. There are statistical features that will favour organic disease, or will, for example, favour ulcer disease. Male sex, smokers, people over fifty, for example, favour ulcer disease over functional dyspepsia. In terms of the management of the individual patient, there is in fact surprisingly little which enables you to reliably identify someone as having organic disease or having functional dyspepsia.

SAFP: Of those patients that you have actually seen and scoped, can you give some indication as to the percentage with functional dyspepsia?

Dr Heading: Collated figures from open access endoscopy on general practitioner referral, about 20% — or just over 20% — of individual endoscopies done in such circumstances are found to have no abnormality at endoscopy. Approximately 20% had an ulcer, and two percent a malignancy. Then there was another substantial group, about 21%, that the endoscopist correctly reported as having some sort of abnormality such as a gastritis. But the majority of gastritis, in particular non-erosive gastritis, is not directly associated with symptoms of dyspepsia and we can not attribute symptoms to it. Such an individual I would therefore include within the group of non-ulcer dyspepsia. So overall we think functional dyspepsia represents about half the dyspeptic patients that we see.

SAFP: We are often faced with the problem of patients who present to us with symptoms of heartburn. What actually comprises reflux disease? If such a patient has a negative endoscopy, is this classified as functional dyspepsia?

Dr Heading: I define gastro-oesophageal disease as the occurrence of symptoms or tissue damage, or both, which is caused by gastro-oesophageal reflux, and in many patients there are both. There is heartburn, regurgitation, belching, and on endoscopy there is oesophagitis, but not always. Not all patients with these symptoms have oesophagitis and it is very important that all doctors, perhaps family practitioners in particular, should recognise that negative endoscopy does not exclude a diagnosis of reflux disease.

How does it relate to dyspepsia? Gastro-oesophageal reflux disease defines a pathological process that is generating other symptoms or tissue damage. Dyspepsia in any form is merely a word that says there is a collation of symptoms. So there are actually two different conceptual sorts of things. Gastro-oesophageal reflux disease can cause dyspepsia but the dyspepsia is a nature of symptoms. Gastro-oesophageal reflux disease is essentially a pathological process.

SAFP: What is the underlying cause of functional dyspepsia? Why do people get these symptoms?

Dr Heading: We do not entirely know. Evidence from research centres suggests that probably one in five is actually previously unrecognised gastro-oesophageal reflux disease associated with normal endoscopy. That is why a proportion respond so well to H2 blockade or to proton pump inhibitors.

We do not have a satisfactory explanation for the remainder at the moment, but we do know that when this group is studied they have a very high frequency of sub-normal gastrointestinal motility. It is a symptom complex that is associated with hypo-motility of the GI tract. But not all have hypo-motility, and we cannot closely relate the motility disorder to the genesis of symptoms. So the link is there, but it is tenuous.

SAFP: Is one able to categorise the patient who is likely to develop functional dyspepsia? Are we able, by exploring the personality type, the contextual situation of the patient, conclude that if this patient develops dyspepsia, then it is likely to be functional dyspepsia?

Dr Heading: This I believe is an enormously interesting area and there has been an immense wealth of new data that has emerged on this in the last ten years. The perception that you, I and most doctors have is that these individuals are likely to be more anxious, more depressed or perhaps are having difficulty with social or domestic circumstances, they may have rather sub-optimal coping skills. However, this does not have statistical association with dyspepsia at all, but it does correlate with healthcare seeking.

Community surveys in relation to the existence of dyspeptic symptoms show that three out of four individuals with these symptoms never go near a doctor at all. Psycho-social factors seem to have a major influence on determining whether an individual with these symptoms consults a doctor. We must abandon our former beliefs that these psycho-social influences were the cause of the symptoms, because the evidence that has emerged is against that. Our perception that the patients that we see have those symptoms is correct because those symptoms have made them more likely to come to us.

SAFP: If an adolescent presents with dyspeptic symptoms, is this something different? Should we have the same approach in managing this patient as we have in the adult?

Dr Heading: I am very wary of giving a general practitioner advice on that. The adolescents who have been sent to me by the general practitioner with a letter indicating his anxiety about the problem has often resulted in the practitioner's anxiety not being unfounded. Pathology of a sort that one would not ordinarily expect in an adolescent is invariably identified. When a general practitioner is uneasy, he is usually right to be uneasy!

Dr Garth Brink speaks to Dr Robert Heading, Consultant Gastro-Enterologist, Edinburgh, Scotland

SAFP: A patient comes to see us for the first time with symptoms of dyspepsia. He has been to the local pharmacist, tried antacid therapy, and an H2 antagonist from which he has not obtained relief. How should we approach this particular patient?

Dr Heading: A research study published about eight years ago in the United Kingdom regarding this aspect provided most interesting results. This study attempted to characterise the difference between individuals with dyspepsia who came to doctors, and those who did not.

It turned up a reminder of a principle that is well known to many doctors, and I think general practitioners in particular, that the reasons why patients consult a doctor may not be the same as the reasons they describe to you. The fact that one of the major reasons that an individual comes to a general practitioner in the United Kingdom with dyspepsia is not the severity of symptoms at all. It is anxiety about what is the underlying problem, and that this patient may actually be getting worried that there is something serious or lethal underlying the symptoms.

SAFP: Would it be sufficient then merely to allay his anxiety? Is it dangerous to assume, on clinical grounds, that there is no major underlying pathology?

Dr Heading: It is possible to break it down into those with symptoms of a mild nature who after reassurance may say: "OK that's fine, I'll live with that!" And others, of course, who have more severe symptoms who actually, though they would welcome reassurance, would also welcome symptom relief. I think the important aspect, from the general practitioner's point of view, is to appreciate just how prevalent this problem is. It may be, for example, that the benefit that they have obtained with the antacids or the over-the-counter H2 antagonists, was actually quite good. But, it has just gone on long enough so as to trouble them, or the wife has nagged them, or the husband is worried about it, and so on. This is again a reminder that you are managing a whole individual and a whole family situation, not just symptoms!

SAFP: This is so true, as we need to understand the patient's fears, what their needs and expectations are. By doing so we will have a satisfied patient . With this particular patient, as there has been no response to the medication already used, should we consider a prokinetic drug? At what stage should he undgergo endoscopy?

Dr Heading: Some of the economic analyses that have been constructed in the last year or two are of some interest, in that they produce results contrary to our expectations. These analyses show that the net difference in cost between endoscoping relatively promptly as opposed to treating first, and seeing how it goes, is a lot smaller than perhaps many of us have hitherto imagined. I have come to the conclusion that we should consider endoscopy relatively early — at least in the United Kingdom healthcare context — because the belief that that incurs additional cost has not been sustained by analysis.

As far as the therapy is concerned, the prokinetic drug class is probably the class with the biggest benefit of any that has been shown, though we must not overestimate the magnitude of benefit. There is a substantial placebo response in this patient group and the prokinetics add somewhat to that. If these drugs are to be used in this context of functional dyspepsia, all the substantial efficacy data relates to periods of about four to six weeks of therapy and then stopping. This is not long-term continuous medication. Benefits in primary care patient groups seem to be quite real: good symptom relief at the end of four weeks in approximately 75% of patients and sustained symptom relief for many weeks or even months, thereafter.

SAFP: If the facilities for endoscopy are not available, what should be the approach in managing these patients?

Dr Heading: Tailor your healthcare management policies to the facilities around you. For the patient in whom you are reasonably confident, on clinical grounds, that no sinister disease is present you will proceed to treat on an empirical basis. Benefit for these patients has been demonstrated in clinical trials with acid suppression (H2 blockade), and there is benefit demonstrated with prokinetic drugs. I think a therapeutic trial of either can be considered to be legitimate, and if one does not work then I would opt for a four-week therapeutic trial of a prokinetic agent.

SAFP: You mentioned symptom relief over four weeks using a prokinetic agent. Does symptom relief occur sooner than four weeks?

Dr Heading: Yes, I think it does. It is interesting that most of the studies that have been conducted have evaluated the symptom change over the four-week period. There are a small number of studies that have looked at it over a two-week period as well, but the best data relates to a four-week period.

SAFP: It is interesting to note that in some patients there is quite considerable long-term remission of symptoms. Is it possible that the pro-kinetic drugs have some additional affect that we do not know about? What do we do with those patients who have had a prokinetic agent — they have done well, but perhaps a month or two later, relapse! Is this a definite indication for endoscopy?

Dr Heading: Why is it that at the end of four weeks in perhaps two-thirds of the individuals treated, the benefit is evident and appears to be sustained thereafter, even though medication has stopped? I think there are two explanations: the first is that we have maybe underestimated the benefit to the patient of the initial endoscopy which has produced reassurance . Secondly, if the medication has diminished the symptoms, you have a situation perhaps six weeks after presentation where the patient can come to terms with the problem. The patient might not be so much better in the narrow symptomatic context, but has accepted, adapted, and is prepared to proceed. This is speculation on my part but I suspect that it is a major part of it. It is a minority that will relapse one or two weeks after therapy. It is this group of patients who should be subjected to endoscopy.

The individual with persisting or recurrent functional dyspepsia is likely to be a burden to themselves, their family and the general practitioner and the need to take things forward with a view to more definitive and perhaps specialist investigation, would become increasingly desirable as relapses occur.

SAFP: Referring to the prokinetic agents, for example, Cisapride, what dosage should be used, and what side-effects can be expected?

Dr Heading: The usual recommended dose has been to a total of about 40mg a day. Some have used 10mg tid with up to a 30mg total. The adverse reactions are well described — increased bowel looseness is well established. More recently the possibility of cardiac arrhythmia has been raised with certain antibiotics and antifungal drugs. I think cardiac arrhythmiea is much more of a concern in the specialist use of Cisapride when significantly higher doses are used.

For functional dyspepsia, which is the common thing seen by gastro-enterologists and general practitioners alike, a 30mg or 40mg total dose per twenty-four hours is standard, and seems to be pretty safe.

SAFP: Could I ask you to comment on the initial use of H2 antagonists and proton pump inhibitors (PPI's) in the management of patients presenting initially with dyspeptic symptoms?

Dr Heading: The acid-suppressing drugs have been an enormous boon to humanity and medical practice. However, these drugs need to be used properly and in the treatment of gastro-oesophageal reflux disease they are of enormous benefit. I think I

am perfectly happy to see H2 blockers or PPI's used on the basis of good clinical diagnosis of reflux disease. The long term use on that basis I am happy with, provided that we are as sure as we can be about the diagnosis.

There was some comment made in the United Kingdom a couple of years ago that the general practitioners were essentially "throwing" these drugs around in a rather cavalier fashion. Together with a number of practitioner colleagues, I was involved with a study to ascertain exactly what was happening with regard to the prescribing of these drugs. I am pleased to say that, contrary to our expectations, we found that general practitioners were being a lot more disciplined about this than we had all hitherto anticipated. Whereas these drugs, PPI's in particular, were being used short-term, they were actually being much more disciplined when it came to long-term repeat prescription of these drugs. Two, three, four, five, or even six weeks empirical therapy, to see how it goes under many circumstances, is perfectly reasonable. Long-term prescription without a precise diagnosis is not helpful to either the doctor or the patient.

SAFP: This emphasises what you stressed earlier — to endoscope early gives us absolute certainty of the underlying problem. We can use the appropriate drug for the appropriate period of time and have a satisfied patient.

Dr Heading: That is correct. What has emerged relatively recently is that we have underestimated the extent to which that provides satisfaction for a patient. The economic analysis confirms that the expectation of going for endoscopy early is more expensive, is counterbalanced by appropriate prescriptions with a clearer knowledge of what the pathology is and what the circumstances are. Drug costs are therefore optimised.

SAFP: Finally, can I ask you to highlight for us, as family physicians, what would be four key aspects that we should bear in mind when confronted with patients presenting with dyspepsia?

Dr Heading: Concentrate on the patient! I would turn it round in a slightly different way and say that the family practitioner, or indeed the specialist likewise, needs to have a very well thought through list of questions to him or herself: "What are we trying to do with this patient?" I see this patient who has just walked into my consulting room, and the first question I would pose is: "What is it that is actually bothering this patient?" Maybe the symptoms, maybe other things?

And then the next question is, is investigation, by endoscopy, going to be helpful? Is it going to help me in determining what is going on? Is a clear answer from endoscopy going to do more than just be a statement, in terms of reassuring this individual that there is nothing seriously amiss'?

Once you've got through that one, and we assume that there is nothing found at endoscopy, then you might be saying, is that going to be enough for my patient? Is what he or she really wants to know the fact that there is nothing amiss, or do we need to resort to drugs?

Then, the fourth question is: Which drug, and for how long? (Assuming the answer to your previous question was positive.)

It is the totality of the symptoms the patient describes. From the non-verbal signals that are communicated during the consultation you get an overall sense of why the patient is there, and you take it from there.

I think those are the questions that good doctoring is all about rather than a kind of ritualistic analysis of particular symptoms.

SAFP: This enforces the whole ethos and principles of family medicine, of understanding the patient, determining the particular needs, the expectations and the concerns of the patient. In doing so, we are more able to address the particular problem that the patient has and give the answers that they have come to seek — although they might not express them directly to us. ●