
My name is Eamonn Quigley and I'm privileged to serve as Chair of the World Gastroenterology Organisation Foundation. The World Gastroenterology Organisation, though over 50 years old, only recently established a foundation whose specific remit was to raise funds to support the educational and training activities of the World Gastroenterology Organisation. These training programs have been highly successful and include: Train the Trainers, a total of 16 WGO Training Centers, over 20 global guidelines, and World Digestive Health Day. Indeed, World Digestive Health Day has become a major focus for the Foundation. WDHD, as we call it, was established in 2004 and is a worldwide public health campaign which we work through our member societies, of which there are over 100, and indeed, reach at least 50,000 individual gastroenterologists.

However, the focus of these campaigns is on the general public and each year we identify an issue in digestive or liver disorders, which we feel is of global importance. And our goal is to reach the general public, reach healthcare practitioners, and increase awareness of prevention and optimum therapy of these conditions.

In the past we've highlighted such conditions as liver cancer, Helicobacter pylori, diarrhea, and hepatitis. In 2012 we took a somewhat different approach and we highlighted what we referred to as common GI symptoms in the community. Indeed, the title of the topic was "From Heartburn to Constipation: Common GI Symptoms in the Community - Impact and Interpretation."

And the goal of this campaign was to help the individual sufferer and healthcare providers to understand these symptoms, to know what they meant, and to know how they could be appropriately and effectively managed. And indeed taking it all the way from the man on the street to the individual sitting in a specialist office.

Thanks to an unrestricted educational grant we have therefore created this webcast for the general public on the irritable bowel syndrome. Why irritable bowel syndrome? Simply because it is, after all, a collection of some of these common GI symptoms: abdominal pain, constipation, bowel habit, bloating. And in this webcast we hope to address what is irritable bowel syndrome, what causes it, and what can be done about it. And now it gives me great pleasure to hand over to Professor Richard Hunt, who is going to chair the symposium.

SEGMENT 1

Welcome to this webcast on the Irritable Bowel Syndrome: What Is It? What Causes It? And Can I Do Anything About It? The objectives of our symposium today, are what IBS is and indeed what it is not; the range and impact of IBS symptoms; how to communicate these symptoms more effectively if you're a sufferer; the role of diet and dietary supplements; how the sufferer can reduce their IBS symptoms; the overall management of IBS; and to look at new treatments.

To address these topics in this symposium, I'm joined by Professor Eamonn Quigley from the Division of Gastroenterology, Methodist Hospital in Houston; Professor Pali Hungin, who is Dean and Professor of Primary Care and General Practice at Durham in the U.K.; and Dr. Anton Emmanuel, who is a senior lecturer in neurogastroenterology at University College Hospital in London, where he's also a consultant gastroenterologist.

In addressing irritable bowel syndrome we really need to understand what the definition is and how we see IBS. And to address this question I'm going to turn first to Eamonn Quigley from Houston.

Thank you very much, Richard. I think the first point I would like to make about irritable bowel syndrome is that it's not a single entity; it's actually a collection of abdominal and bowel-related symptoms. And when we think of irritable bowel syndrome the symptoms we think of are first of all pain or discomfort in the abdomen. Secondly, some alteration in bowel habit, and it's very important to understand that this alteration could be constipation for some patients, could be diarrhea for other patients, and for others still it could alternate between diarrhea and constipation. And the third symptom I think about is bloating, which in some patients may be accompanied by actual visible distension.

Now the other important point to make about irritable bowel syndrome is that while each of these individual symptoms are very common in the community, it is when they come together and recur over long periods of time that we begin to describe them as irritable bowel syndrome. Now there are a number of other important features which really begin to make me think about irritable bowel syndrome when I see a patient in the clinic or a patient is seen in primary care. First of all, irritable bowel syndrome typically occurs in episodes. Some people call these

“bouts,” other people call them “attacks”. One phrase patients often use when they see me in the clinic or sufferers may use in the community is that they say, “Oh, I was fine for a week or two, everything was perfect, and then I was terrible, I was really struck down by these symptoms for several days on end.”

Typically, at least in our part of the world, and that’s in Europe, North America, irritable bowel syndrome is much more common in females. It can occur at any age, but most commonly the symptoms start either in the late teens, twenties, or thirties. There are another few features that we should emphasize, and when we talk to individuals that have irritable bowel syndrome they’ll often say, “my symptoms are worse when I eat. They’re worse when I’m stressed.” And of course, females notice that their symptoms fluctuate with the menstrual cycle.

The severity of these symptoms varies tremendously. For some patients they’re no more than an occasional nuisance, for others they really are totally disabling. Now one of the things we’ve realized recently about irritable bowel syndrome is that while the classical symptoms tend to involve what we would call the lower gut, a lot of these patients have symptoms in the upper part of the gut, such as heartburn or indigestion or nausea. And even more interestingly, many of these patients have symptoms in other parts of the body, such as fatigue, muscle aches, bladder problems, etc.

Now one of the things that caused a lot of confusion about irritable bowel syndrome is that some people with irritable bowel syndrome have anxiety and depression. But it’s important to understand that irritable bowel syndrome is not caused by anxiety or depression. What happens is that if you have irritable bowel syndrome and you have anxiety, or you are depressed, your IBS symptoms are much worse and you’re much more likely to come and see a doctor or come and see a specialist.

Now you could ask, why we’re spending all this time talking about irritable bowel syndrome. Well, there are several reasons that I think we need to really focus on irritable bowel syndrome. Firstly, it is common. There are been various surveys done; indeed, Professor Hungin did a very important study here in Europe showing that irritable bowel syndrome occurs in about 10 to 15-percent of the population. Secondly, as we have already mentioned, for some people it can cause very troublesome symptoms. And these symptoms can be so troublesome as to actually impair their quality of life. Very common features that we see in our clinics are patients who say, “I just can’t leave the

house. I can't leave the house because I'm embarrassed that if I go out I'll have to be positioned right next to a bathroom. I'd have to rush or I could need to rush at any stage during the meal, so I just don't bother going out." And another symptom that we're going to talk about in some detail that can cause great embarrassment is this abdominal distension, which is real. And patients say, "everybody is asking me if I'm pregnant again, and so I just don't go out."

Because of all of this interference with school, with work, with family life, it can have a socioeconomic impact for the individual as well as for society.

The other great pity about all of this is that if we actually diagnose irritable bowel syndrome accurately, and if we treat it well, patients can do well. So it really is a pity that we're not more aware of this condition, that we're not making the right diagnosis, and that we're not managing it properly.

Well thank you for that excellent overview. Now clearly this is a widespread condition which is common in the community, and so I think it's important at this point to turn to Pali Hungin as a general practitioner, and ask you to tell us a little bit more about how sufferers can best communicate their symptoms in order to assist the primary caregiver in making a diagnosis and being as effective as possible in managing this condition.

Richard, as Eamonn has mentioned IBS is a wide spectrum of problems, and a spectrum in terms of severity too. Some people will have rather mild symptoms and others will have troublesome symptoms, but usually it's something that has either occurred or a particular level of severity that has actually driven the sufferer to go and seek medical attention.

I think it's extremely important for the doctor to try to find out what it is that has provoked the consultation, and I think from the sufferer's viewpoint it's important to explain why they've actually consulted. The likelihood is that they've actually had their symptoms for a considerable period of time, but that something has happened which has made them come in to see the doctor. I think identifying that initial reason for consultation is quite important.

From the patient's viewpoint I think my suggestion is that patients should be very open with their symptoms. I think it's extremely easy for people to become rather self-conscious of the fact that they have bowel symptoms. Nobody likes to talk about gastrointestinal problems; it's an unpleasant area for many. But I

think just being open about it and explaining the full range of problems that they have without embarrassment is important. I think that helps the consultation.

And in addressing pain, one obviously wants to differentiate IBS pain from other causes of abdominal pain. This differentiation can help by explaining how they look at their pain. Because we do have to admit that not all physicians spend quite as much time selectively asking. So here perhaps we can encourage the sufferer to triage, as it were, some of their own pain features.

Yes, indeed. I think a sufferer can help the situation by trying to go into greater detail about that pain or discomfort, describing its character, whether the pain occurs before or after a bowel movement, the location of the pain or discomfort, potential timing, things that make the pain better or worse. All these are items which can help to lead onto a more accurate diagnosis, either to decide whether this is irritable bowel syndrome or something else. And of course in most people pain won't occur in an isolated manner without other symptoms. So other problems such as a sense of urgency, perhaps a need to go to the toilet very quickly, or a lack of, frankly, full satisfaction after a bowel movement. These are all symptoms which can occur with pain and discomfort. And having a greater awareness, perhaps having thought through some of these symptoms before going to the doctor, can make the dialogue a little easier.

Gastroenterologists tend to work within the framework of definitions, which have generally been agreed by consensus bodies. How are those seen in terms of working the patient through in the general practice situation?

Yes, indeed. Well, by and large the most commonly accepted working definition of irritable bowel syndrome is probably abdominal pain and discomfort in the presence of an altered bowel habit. I think most of us would accept that as a working diagnosis. And I know from research done by general practitioners themselves that they tend to look at the sufferer as a whole, the kind of total picture of what's going on in the patient's life together with their abdominal symptoms and other symptoms, before reaching a diagnosis of IBS.

Having said that, there are two or three other rather more finite definitions, if I could say that, or formal definitions, if I could put it like that; the Manning criteria and the Rome criteria. The Rome Foundation is an international group of people which has worked

hard to try to put specific items into a description for irritable bowel syndrome. And these definitions are often related more to research rather than clinical practice, but they are based on the patient's duration of symptoms, the frequency of symptoms, and, of course, they include items such as abdominal pain and alteration in bowel habit. And also, of course, whether or not the bowel symptoms are of the constipation variety or of looseness variety.

Now Eamonn mentioned bloating and distension. Any sort of comment that you would make in the primary care setting with regard to those symptoms?

Bloating and distension are extremely distressing symptoms, and very common, almost the hallmark of irritable bowel syndrome. And I must say I'm embarrassed at almost the lack of sympathy sometimes doctors have for patients who present with these symptoms. Bloating is a sensation, a feeling of fullness. Distension is something that's rather more visible and something that's palpable. Patients often say, "look, my clothes don't fit towards the end of the day. I feel that I've actually become distended to the point where people are making a remark about it." Yes, this is one of the features of irritable bowel syndrome, and it's something that the doctor needs to take into account. And it will be good if these symptoms were mentioned by patients early on, because this can help with the diagnosis too.

And you also mentioned that as part of this condition the abdominal pain may fluctuate, would be associated with an alteration in bowel habit. What sort of points about the bowel habit should the sufferer think about presenting to their healthcare provider?

Well, it would be helpful for the doctor to have a clearer idea of the way in which the patient's bowel action had changed in the previous few months or whether in fact the patient had had those kind of symptoms for a very long time. In some people the bowel action might be something that they've just got used to over a period of months and years, and it's perhaps the increased severity of the pain that caused them to come and see the doctor. But there's other things that the doctor is likely to want to know: is there a correlation between the pain and the bowel habit? So for example, a common problem in irritable bowel syndrome is the inability to feel that one has had a satisfactory bowel motion, the need to go back to do the job again, so to speak. Quite often the patient receives a relief of the pain and discomfort from having had a bowel motion, and that's fairly typical of irritable bowel

syndrome. So these are the kind of features which would help in the diagnosis and indeed in monitoring the management of the sufferer's problem.

And then in terms of the symptoms what kind of impact should the sufferer bring out and emphasize?

The impact of symptoms in irritable bowel syndrome is underestimated, I think by all of us. Although many people who have mild symptoms can carry on ostensibly living a completely normal life. We know people who are tired all the time, who sleep poorly. We know people who are unable to do their work properly, whose roles from the social viewpoint are quite severely restricted, who cannot go out to meals, to restaurants. Indeed, personal relationships can be disrupted. It's the kind of problem which affects not just the bowel itself, but the patient's entire being, and I think that the overall impact of irritable bowel syndrome can be quite considerable, and I suspect that most people with IBS are paying quite a price for it.

I think the patient should be honest enough to explain the effect that the problem is having on them. Indeed, that might be the reason why some people seek consultation; it may be that they've come to terms with that distension or that pain or even that bowel habit, but it's the fact that they have somehow become restricted in their overall functioning that they need help with.

So we must really encourage the sufferer to discuss what may be quite personal issues when they see the healthcare provider to really give them an idea of the adverse impact on their quality of life.

I think that personal issues are crucial in irritable bowel syndrome. And I think, for example intimate personal relationships and the ability to form friendships and to be part of a social group, all these items, if they are compromised they create an enormous burden for the individual patient. In these instances it's important to recognize which one of these is the biggest component of the patient's problem, because the management has to be geared to ensuring that we can get an overall improvement in the direction that the sufferer would benefit from.

And they may be developing anxiety about the impact more than about the actual symptoms.

Yes, I think many patients become anxious because of the level of restriction their IBS places on them.

So the sort of last question I think for you is what sort of information should the sufferer give to their healthcare provider about any treatments that they either have tried themselves over the counter, whether they've been seeing naturopaths and actually taking herbal therapies and stuff. What kind of information should they assemble and present to their general practitioner?

Well, doctors are aware and research has indicated that the vast majority of sufferers with irritable bowel syndrome will have tried some sort of therapy or medication or remedy. Many of them will have bought things over the counter that might've helped; they may have spoken with a pharmacist or with a friend with irritable bowel syndrome. People will have tried items that they may have seen in a supermarket or elsewhere or advertised in magazines. I think there's a huge array of treatments out there that people are aware of, some of which are remedies, others are things like relaxational therapies and so on. And it's important for the sufferer to explain to the doctor what they have tried already. This will give some clue as to what might work more effectively in the future, and also eliminate the need to go over ground that's been covered.

Well thank you very much, Pali. So let's turn now to Anton Emmanuel as a gastroenterologist dealing with a referral practice. How do you see irritable bowel syndrome within the context of the previous two colleagues' presentations?

Thank you, Richard. I think in hospitals, in secondary care we tend to see two kinds of patients; we tend to see patients whose symptoms are so intrusive that either the sufferer or the GP has felt the need to get further opinions. And the second category of patients we see are the ones who may have had investigations to be sure that there's nothing else going on in their guts and where the diagnosis has come up as being that of irritable bowel syndrome most likely. But in either event, what we are dealing with in hospital care are patients whose symptoms are at the more severe end of the spectrum oftentimes. So they are patients, rather than community-based sufferers by this point, obviously.

And I think one of the key things that I would say is important is to try and engage the patient to be able to explain the limitations on their life, because these symptoms are so intrusive and they're so subtle and they've been often going on for years, decades, for our sufferers, that actually I think the role of the doctor often times is

to just act as a mirror to reflect back to the patient the things that they've had to change, the fact that they've had to wear certain clothes, to avoid certain situations, to get up early in the morning, to go to bed later, to avoid mealtimes and certain situations. Those are the things which are most important, because they also, apart from giving idea of severity, they also allow the doctor and the patient to develop a relationship where the doctor understands what's going on in the patient's life, rather than just being a list of symptoms which one ticks off from things like the Rome Criteria, as Pali mentioned. It becomes something which is much more about understanding the patient's individual situation in the context of their symptoms and their lifestyle.

Well, persistence of symptoms is always worrying, both for the sufferer, but also for the primary care physician particularly if there isn't the expected feature of some fluctuation in those symptoms. So as a specialist how do you single out particular features of symptoms that you feel perhaps require a more intensive investigation?

I think the first thing is the chronicity of symptoms; that's a rather important point. That's reassuring to me and I try and convey that to the patient as well, that these symptoms have gone on episodically, as Eamonn said, where they have good spells and bad spells. But that chronicity is often terribly reassuring at that point. So there's little fluctuations, but as you say, the overall trajectory is basically flat. Within the individual symptoms then obviously there are particular features which make us worry a little bit more or, equally, to reassure us. So patient symptoms which (where the stool caliber, the kind of consistency of what comes out), fluctuate with time, especially when that fluctuation is associated with the bouts of discomfort. That's enormously helpful in pointing us toward a certain direction where we can avoid intrusive investigations again.

Eamonn, your experience is largely in the specialist referral population as well. Do you have any comments to add to that?

I would just like to emphasize some points that both Anton and Pali have made. And first is the bloating and distension issue. And I think for a variety of reasons we've tended to underappreciate how frequent these symptoms are among patients and how intrusive they are for patients. And I think it's a major progress for all of us that we are beginning to appreciate the frequency of these symptoms and their impact, and I think it's very important for that

reason, as Pali has mentioned, to ask about these symptoms and to differentiate between bloating and distension.

The other area where I think I find the most confusion is about bowel habits. That may sound ridiculous, but a lot of doctors don't appreciate the range of symptoms that are related to constipation. They just say, "How often do you go?" but they don't ask about, "Do you have difficulty going? Are you straining?" As Pali said, "Do you feel as if you have had an unsuccessful or an incomplete bowel action?" So we need to ask more about exactly what the patient means by constipation, and similarly about diarrhea.

A big mistake that a lot of us make in terms of diarrhea is that we confuse diarrhea with frequent bowel movements, because as Pali mentioned, a lot of patients with irritable bowel syndrome have the urge to go frequently, but a lot of the time they actually just pass a bit of mucus or it's not actually diarrhea. The reason that's important is that if we put them on anti-diarrheals we'd probably make them much worse, because they don't actually have diarrhea.

And there is a very simple tool which was developed actually quite a long time ago, which is called a Bristol Stool Chart. And I know a lot of doctors have these charts and they give them to the patient, and the patient can look at this chart, which is now on your screen, and you can see what type of stool you have and you can describe that to the doctor. So it gives, if you like, a more objective means of knowing exactly what the problem is with their bowel habit. So I think these are two very important issues that we as doctors need to be better educated on.

Well I think you're making a very important point with respect to stool and frequency and so on, because in my experience a great deal of the problem is the patient's expectation of what a normal bowel habit is. And I'm afraid to say that I think there's also something of a missed connection in terms of the way that many physicians view what a normal range bowel habit is. And so I think your points are really important to convey to our audience today.

Yes, it's very important, I think, in talking about bowel habits with patients, not to impose your expectations on them, but actually to hear from them. What they feel the problem is. Then I think we'll all be in a better place.

So thank you very much for that Eamonn. And I think we've heard from the three of you some really important points in relation to what matters to the sufferer in terms of how they interpret their

symptoms and the key points that they need to transfer to the healthcare provider at their first visit. Thank you very much.

SEGMENT 2

There's been a lot of research in recent years into irritable bowel syndrome. We've heard a lot about the epidemiology and the impact of the disease and how it is affecting a variety of different symptoms. But we need to try and understand rather better what may be going on in terms of the underlying pathophysiology. So I'm going to ask Eamonn Quigley to give us an update into our current understanding.

Well I guess the first question that many sufferers or patients ask is, what is the cause of irritable bowel syndrome? And my answer always is, "There's probably no single cause." This is probably a group of symptoms which have multiple causes. But there has been progress, and I think probably the most significant single piece of progress to me has been the realization that some individuals can develop irritable bowel syndrome for the very first time after a gastroenteritis episode, and we call that post-infectious irritable bowel syndrome. And I think that observation, which has been made in many parts of the world, has really changed our approach to the research in irritable bowel syndrome.

As we've mentioned already, stress is another important trigger in some people, and there's been a whole body of research about the role of stress and factors associated with stress and various hormones in irritable bowel syndrome. Certain foods trigger IBS for some people, and we talk a lot about this later on. And again, just recently there's been a whole load of research about various foods and how they might trigger irritable bowel syndrome, and there are probably many more factors.

Now a very useful way of looking at irritable bowel syndrome; in fact the way that most researchers look at it, is the so-called gut-brain axis. And in this cartoon, which you can see on your screen, you can see the patient with pain, with discomfort, clearly having an emotional reaction to this in terms of the brain. And this interaction between the brain and the gut is very important in irritable bowel syndrome. And for example, we can look at this from two perspectives. First of all, if we take it that— in some people the main problem may be in the gut; there may be a reaction to food or there may be a reaction, as I mentioned, to an infection. And this has an impact on the gut where it affects gut muscle, causing spasm, or it leads to increased sensitivity, so we

call it “visceral hypersensitivity.” And this is a situation where the gut is hypersensitive to any stimulus, and that then leads to pain and discomfort, and of course, this then leads to an interaction with the brain, where the patient is uncomfortable; it upsets them.

Then you can take another situation, for example, where the individual is stressed, they’re anxious, they’re depressed, which of course would be brain symptoms, if you like. And we know from a lot of research that this can impact on the gut and cause abnormal motility and abnormal sensitivity in the gut and lead to gut symptoms. And this interplay between the brain and the gut is critical in the development of symptoms; in some patients it may be more gut, in other patients it may be more brain, in others it may be a bit of both. I think that’s a very useful way of looking at the causation of irritable bowel syndrome in many different people.

Well, Anton Emmanuel is a neurogastroenterologist with a great deal of knowledge about the myenteric plexus and the way that the functions of the gut are regulated. So I’d like to ask him how he, from that specialist point of view, sees the pathophysiology of this condition.

I think this is an important question, because patients often like to know why they’ve got this condition. And I think it’s important for doctors because it also helps us to explain to the patient. And I think, as Eamonn’s alluded to, a very important issue is this issue around the guts being sensitive, they feel things too easily. And it’s important to try and understand that, because there is this constant sort of dialogue between the brain and your tummy; that’s how you know when you’re hungry, that’s how you know when you’ve had enough to eat, that’s how you know when you need to open your bowels. There’s this messages coming up from here, up to here, and in turn there are messages coming from here, back down to here to tell you to stop eating now or to go to the toilet or whatever else. And if that kind of delicate dialogue is interfered with by infection or by emotional triggers or anything, either at this end or this end, that is when things can go wrong. And those little insights, like the infectious insight, like the relationship with stress in some individuals – not every individual, but some individuals – those are really critical things, because they help the patient understand why they suffer, but they also begin to help us understand a little bit more about how maybe we can target our treatments in a more useful way for patients.

And if I could add just another point, I think it’s very important for IBS sufferers to understand that the sensitivity is in the gut.

They're not wimps, they're not sensitive to everything. In fact, there's lots of research showing that, in terms of other sensitivities, they're completely normal. So this seems to be a peculiar predilection that they have to being sensitive in the gut.

So Pali we've heard some quite esoteric suggestions as to what may be going on in the background of IBS. Do you find it helpful in the primary care setting to give an explanation that takes these new concepts into account when you're managing your patients with IBS?

Yes, indeed. I think that from the general practitioner's viewpoint, all the items that you've discussed in the last few minutes can be very nicely brought together to say a patient is a person and their pain and discomfort is part of what they feel as a person, and that you cannot separate the gastrointestinal system from other parts of the person, which is the thinking mind, the so-called brain-body axis, or whatever other phrase we might use. And certainly one very good and clear explanation for irritable bowel syndrome is that the lining of the gut has become over-sensitive and that this is sending messages to the brain which cause a perception of great discomfort and in return, of course, then the individual gets a reaction to that.

So this oversensitivity or hypersensitivity of the gut I'm not sure that we necessarily understand clearly how this happens and how it can be dealt with, but that is to me the most obvious explanation for the symptoms that a person sees.

Is it one you find the patients understand readily?

Yes, because I think patients understand that if their bowel system is oversensitive to either what's happening inside or to pressure inside the gastrointestinal tract then these perceptions and these signals are abnormally transmitted and received, hence the discomfort and the pain.

Well thank you for that. Of course, one of the concerns about persistence in terms that have not necessarily been fully explained, is whether something else is going on. And of course the individual symptoms might be caused by a variety of different disorders. And since we have no specific test for IBS, that tends to amplify some of these concerns. But of course there is good news, because if you are young, you have typical IBS symptoms of abdominal pain which is fluctuating with altered bowel habit, as is being discussed, and you have no warning signs, or red flags as we call them, such

as weight loss, blood loss in the stool, vomiting, then the diagnosis is very likely to be accurate and it's very unlikely to change over time, as we have heard.

But patients and sufferers from IBS will question whether they need investigation and to what extent that investigation might go. Typically if as we've said, the patients are young, the symptoms are typical, very few tests may need to be done. These days typically your doctor might test for celiac disease since there is a slight increase in celiac disease amongst IBS sufferers. Usually a test will be done to check for anemia and some evidence of inflammation. Stool might be tested for infections or for blood in the stool. And depending upon age and various other factors there may be a need to image the bowel, either with x-rays or with endoscopy. So this is the usual path of approach to the patient with IBS symptoms.

Let's now ask our experts how they view this need for investigation first in the primary care setting, Pali.

I think that it's normal human nature to think the worst, and I think both the sufferer, the patient, and the doctor will want to make sure that there isn't anything drastic going on. Let's be honest about it, some patients will fear, and indeed their doctors might fear that the patient has some form of cancer or some other more dangerous disease. Indeed more commonly now in many European countries with a greater awareness of ovarian cancer, many women might fear that they have ovarian cancer problems.

Having said that, I would like to reiterate what you've mentioned, which is that a positive diagnosis of irritable bowel syndrome is possible made on the basis of symptoms, the length of history, also with the use of simple blood tests to exclude anything like celiac disease or anemia, a stool test to rule out infection, perhaps other blood tests to rule out inflammation. Once those things are out of the way the chances of the diagnosis not being IBS are very, very low. And we know that irritable bowel syndrome is not a condition that turns into something more dangerous or worrying over a period of time. So in the vast majority of patients we can be quite confident of the diagnosis based on the history and the examination.

At the specialist level, Anton, you're going to look at this somewhat differently perhaps. How do you view the need for investigation in patients who come to you with IBS?

I think the right thing to do is to come again to the patient's symptoms. And I think when the symptoms are bloating and pain, I think there's a very particular set of things, which I think Pali alluded to, the gynecological features. Because the diseases in the gynecological systems can vary, very easily and very commonly mimic gut symptoms. And we have really no way of examining for that. And so an ultrasound examination, maybe some blood tests, those things would be important in a female patient to be sure that there's nothing going on within that system. And it can be horrible diseases of the sort Pali mentioned, or it can be quite benign things which can mimic this condition.

And as far as the gut goes, again, I think Pali has raised a very important point about this need for – or possible need for colonoscopy, this examination of the bowel, or x-ray examination of the bowel. And this is quite tricky, because I think, you know, patients often get a bit nervous about this, but on the other side feel the need to have it done to be absolutely sure, because unfortunately bad things that happen in the bowel are very prevalent and we all know somebody or have somebody in the distant family whose had something like this, and it's quite a tricky area, I think.

But you're going to, in that setting, age 50-ish positive blood in the stool, you're going to do it anyway. Family history perhaps, particularly of young onset of malignancy.

Absolutely. And I think that's exactly the point. So it's – or as you say, exactly to do with the symptoms and the context of the patient. So where there is a high likelihood of disease, of course it's our job in hospitals to persuade the patient, who may be a bit unwilling, to have these tests done.

Equally importantly, there are situations where we can be really very confident. We got a very positive message from the GP saying, "This is a patient I've known for decades." We take a history where they sort of tick the boxes of the criteria which fulfill what we consider IBS, where there's no alarm features, the things you mentioned as red flags. And when that's the situation, we need to be able to be strong enough to give the patient confidence as well in our clinical acumen and that the diagnosis is secure. And as Pali and Eamonn said earlier on, this is a diagnosis which we can be confident of making and be confident that if we do it positively we can be fairly sure that patients won't go on to get something horrible.

Yes. And I think reassuring the fact that colon cancer rates in IBS sufferers are certainly no higher, and possibly a little lower than in the general population.

And there is a risk in continuing to investigate the patient.

Absolutely. I agree.

Because that may convey to the patient your uncertainty, and it also conveys to the patient that IBS really isn't that important, and we're trying to find the important things. And that's not the way you should be approaching it. I completely agree that there are a number of situations which both Pali and Anton have identified where investigation is appropriate. And I would add one other one, and that's the patient who has continuous diarrhea, because there we do begin to think of celiac disease, which has been mentioned, and we think of inflammatory bowel disease and some other gut inflammations.

But if you take the 25-year-old female with constipation, with bloating, with these intermittent symptoms, there really is very little need for much in the way of investigation, and continuing to investigate that patient is going to expose them to a lot of discomfort, a lot of distress, as Anton has mentioned, and is really going to be fruitless.

Eamonn, let me for a moment though take the opposite viewpoint. Let's assume that I am a patient with the kind of symptoms that you've mentioned. I know that as my doctor you would try to reassure me as much as you can that I have irritable bowel syndrome and nothing more dangerous. But if I still have a doubt in my mind and I'm not completely convinced, and if a great deal of my anxiety is about the fact that I might have a hidden dangerous disease, then how do you think you as my doctor should handle my situation?

Well the way I would handle it is as follows. I think first of all I would say that, you've got irritable bowel syndrome. This is a real entity, it's a very important entity, and in your case it's a disabling entity. And that we know from a lot of experience that severe irritable bowel syndrome can be as disabling as heart failure, as high blood pressure, as a lot of other "serious" diseases. That's the first point I would make.

The second point I would make is that the likelihood of as you've already mentioned, in a 25-year-old female with these symptoms

and not having this and not having that, having cancer is zero. And so I think that is the way I would approach it. And I think you have to keep that dialogue with the patient. And as you've mentioned and you've all mentioned, if you've, in your first contact with the patient, gone into the history in detail, made it clear to the patient that you understand not just their symptoms, but how they're affecting them, then it should not be a problem.

Surely, is this not one reason why some sufferers go from one doctor to another, because in spite of the explanation, they're not as reassured as we would prefer them to be?

But I think I've been here, because I think we have a major responsibility as physicians to always draw a bottom line. And a lot of physicians these days I think are a little reluctant, because they worry themselves about being wrong. And if you convey that to the patient as Eamonn already said, I think that is as much of a problem in perpetuation of the anxiety, if not the symptoms, that it is important to say, "You're a 25-year-old, you're a female, you've got the classical symptoms. You do not need a colonoscopy."

And it's interesting that in recent years I've noticed a change. I've noticed patients saying, "I think it might be irritable bowel syndrome, Doctor. Is it irritable bowel syndrome?" Ten years ago the approach was that the last thing that was left after everything else was negative was irritable bowel syndrome. Now patients are saying, "Is it irritable bowel syndrome?" and if you say yes they say, "Fine. Now let's talk how we're going to deal with it."

This is a very good point for me to move to the next topic.

SEGMENT 3

The next topic where I'd like to go back to the community setting and the sufferers in the community setting and ask you, Pali, what sort of things can the sufferer do to reduce their symptoms? And one of them might be understanding the disease and researching it to the extent that Eamonn has just suggested some patients are now doing or sufferers are now doing.

I'm quite convinced, Richard, that the secret to being well or being better or being able to cope with irritable bowel syndrome is a greater awareness of it. And this means learning much more about it; looking at appropriate websites, being properly informed of the various types of symptoms and what one can do about it.

From the practical viewpoint, after having gathered as much knowledge as possible many of the self-help items that can be used are commonly available: relaxation exercises, the ability to alter one's lifestyle to make it perhaps somewhat less stressful. We recognize a link between stress and symptoms. Perhaps modifications in terms of diet. And also increased exercise, a healthier approach, as well as, of course, a dialogue with the doctor in terms of what therapies or medications might be useful for the most troublesome symptoms.

Now Pali has mentioned diet there, which is a big talking point in the health spectrum of irritable bowel syndrome, Anton. Give us the sort of update as to what we should be thinking about, and particularly the sufferers should pay attention to.

The first thing I'd say is obviously we need to be receptive to what the patient's experience is. Some patients feel that their diet is blameless and actually there's no relationship between their symptoms and their diet, but as you say, a majority often have a sense that there must be. And I think the first thing is that it's often the context of the meal and the style of eating which is probably more important than actually the nature of what the foodstuff is that's being put into our mouth. And therefore, trying to understand, you know, when patients have dietary symptoms, is it a relation to diet at work, when they are eating on the hoof, or is it mostly a weekday phenomenon?

Skipping breakfast

Yes, the pressures of modern life put upon us with school runs and work life. So there's that aspect of things.

Within that, however, we must also - once you've talked about the context of food and trying to get the balance that Pali described - we also have to think about the particular foodstuffs, because certain patients are very clear in their description that, "Every time I eat tomatoes or mushrooms" or certain things which are for them individual, they will say that they are very clear that these things trigger symptoms. And we try to make a point that sometimes people are intolerant of certain foods, and that's quite distinct from talking about being allergic to a food. I think that's a very important point, because people can go down sort of false paths where they're looking for allergies, and allergies in the gut do exist, of course we know. People eating things or people exposed to things, we get the typical sort of hives type reaction, and that's a

very characteristic and unpleasant thing. But that's quite distinct from the gut symptoms that patients are describing here. Patients will get this

Probably more common in children

That's exactly right. So I think that kind of true allergy is something which we, again, we will spend time to tell patients it is not what's happening, but it's more to do with how well your gut and you tolerate a certain foodstuff that maybe is causing trouble.

And one of the real culprits we see in both children and adults is this issue around milk products and this milk sugar called lactose. And in some individuals there may be an issue where they don't-

have the right balance of enzymes in their gut, which helps them break down this milk sugar, and therefore they can get rumbling tummies and sometimes loose stools and tummy pains. And that is an issue for some people. And again, patients will often have picked this up themselves and they've had made little adjustments to their life, and we can sometimes sort of seize upon that as a way to try to help the patient develop some part of the self-help.

And I think it's interesting that we're all sort of saying the same thing. We may see patients in slightly different context, but actually it's about building up that common message from both primary and secondary care so that it isn't that, "Well, this doctor said this and now you're saying this about food." I think that has been a danger historically; some patients will have experienced certain doctors who are very enthusiastic for certain approaches. And I think that's one of the things that's actually held back IBS patients, and I hope that this commonality of approach is something that is useful going forward.

What about gluten, Eamonn? There is this association with a slightly higher rate of actual celiac disease, but it seems to extend to patients who do not have celiac disease. Gluten still seems in some patients to present a problem.

Well, I think there are two important points here. The first is that celiac disease has changed, and Richard, you and I will remember a long time ago, when we were medical students, a celiac patient was emaciated and had terrible diarrhea and was malabsorbing lots of vitamins, etc. We don't see those patients anymore. Nowadays the celiac patient presents with kind of IBS-type symptoms. So that's the first point to make, of the diagnostic side is that it's

important in countries where the incidence of celiac disease is high, and that applies to most European countries, we should be checking for celiac disease.

So once we got that out of the way, you're absolutely correct, there seem to be patients who do not have celiac disease, but who still tell us that they have problem with gluten. And up until recently I have to admit I thought they were taking nonsense. But they're not. And there's now been a number of studies, very good studies, which have shown that there appears to be an intolerance – and I use the word very carefully, as Anton was pointed out – I use the word “intolerance” to gluten, which can be helped by going on a gluten-free diet. And similar research has also shown, again, very like Anton said, that there is an intolerance to some other sugars, like fructose and sorbitol and so-called FODMAPs among patients with irritable bowel syndrome, which can be helped by dietary interventions.

But I would emphasize again and again a point that Anton made, is the difference between allergy and intolerance.

Because unfortunately, there are a lot of people out there offering allergy tests, which are expensive, which yield useless information as far as I'm concerned on irritable bowel syndrome, and I believe that in irritable bowel syndrome in general there's really no place for allergy testing. But there is a great place for a detailed evaluation of the diet and possible dietary interventions.

And I think another caution about the allergy testing is that it may lead to patients or sufferers excluding something from their diet which they actually don't need to do. Would you like to say something about exclusion diets, Anton?

So I think this is quite a tricky area, because again, patients often have a perception of certain things which are very much a nuisance and will therefore exclude that. And again, as I was saying earlier on, this was a cumulative set of symptoms over years; people will gradually exclude this and then add this exclusion and add that exclusion and actually then what you can sometimes end up with is the occasional patient who's taking a very restricted diet and then feeling the need to supplement that with, you know, little capsules of this and that from the supermarkets. And I think that's often erroneous because it's an understandable danger that patients face when they haven't had good advice from specialists who haven't had much to say on the subject, or if they have had something to say have often been wrong. And I think therefore we have to

almost let the patients gradually come back to the fold almost and say, “Look, let’s try and reintroduce it and find out what your symptoms are; unfortunately, it’s bad, but at least you’re eating in a more sensible way.”

And one of the particular things I guess we need to mention in this situation is this issue around fiber.

Yes, I was going to ask you about that, because clearly some get benefit, others don’t. How would you suggest to our audience today that a sufferer of these symptoms might address the fiber issue?

This has been a thorny issue for sort of 70, 80-odd years we’ve had this notion of fiber being a very important thing. And certainly for a lot of patients who have a sluggish bowel where the stools are sort of poorly formed and the like, augmenting dietary fiber can be a way of doing it. The problems are that it isn’t absolutely clear to most patients, and in fact lots of doctors, how best to do that. The first thing is that the fiber comes in, broadly speaking, two forms. There’s the so-called soluble and insoluble forms. And in general terms soluble fiber refers to the fruit and vegetable fibers, whereas insoluble fiber mostly refers to those cereal-type fibers. And what’s very clear is that in most Western type diets we take a good deal of the insoluble fiber; we have diets that are very high in pastas and breads and wheat-containing products, broadly speaking.

And even if we take our sort of so-called five portions of fruit and vegetable a day, for most people that doesn’t bring in much more than 10 to 15 grams of fiber a day. And you put into context that for the optimal fiber intake in terms of numbers is about 25 grams of fiber a day for a woman and about 35 grams for a man, you can see that for most of us we’re getting most of our fiber from cereal fibers, rather than necessarily from the fruit and vegetable fiber. And it’s clear that this so-called soluble fruit and vegetable fiber is probably the way we should be taking our fiber, rather than cereals.

So the messages that we try and give patients is to sort of think about making sure you take enough fruit and vegetable so that you get that bulk of soluble fiber into your diet, and not overdoing the wheat and cereal fibers, which tend to cause more gaseousness, bloating, distension, those very uncomfortable symptoms of patients.

Seems to me as well as if a practical point of view, people don't necessarily like increasing fiber, so they tend to do it at a single meal, which I think is actually the worst thing to do. I try to encourage the sufferer to spread the total requirement across the two or three meals of their day which is much easier to tolerate.

You're absolutely right. I think a lot of my patients, I must say, have this thing about sprinkling on their breakfast or getting the bad stuff out of the way, but, like you do when you're a child, you think, "Well, I'll get that over." And so they start their day off with this terrible distension, which then, of course, gives them a miserable day often times.

And I think another point that you and I discussed is that if you are increasing, and some people are only taking 5 to 7 grams a day then you should take maybe three months to get up to 15 to 20 grams or above, that if you go out the next day and say, "I'm going to do the fiber," that you actually start to run into the problems that are so readily described.

Well I think you're absolutely right on two counts. One is this issue about sort of going at it bull at the gate, sort of quickly to get it in, but then equally expecting rapid results. That's the other problem with this approach, is that if you do it too hard and expect too much, actually you don't let your body adapt to this. Because what fiber is doing to your gut is to alter some of the chemical and physical changes in your tummy rather than just having an instantaneous switch on a light effect. So I think we have to counsel patients about what to do and what to expect.

So any final comments Pali or Eamonn on this dietary approach to IBS?

Well, it's very important from the point of view of the family doctor. I think the first question patients will ask is, "What can I do diet-wise to make myself better?" I think a good general approach is probably to say, look, why don't you try reducing wheat or any other item which you think might be responsible for triggering your symptoms? But I think the key here is if you're going to eliminate anything for a period of time, it has to be done for a minimum of two weeks, perhaps a month. And if that hasn't worked it's okay to go back on that and then perhaps to try something else. But once you've tried two or three things and they haven't worked or if they have worked, fine, but if they haven't worked, you should go back to eating a normal diet. The message

there is your problem is probably not going to be solved by altering your diet.

Eamonn, what about probiotics, which we haven't mentioned, where an additional factor within the spectrum of diet?

Well, I think there's now good evidence from a number of large research studies that, in general, probiotics help irritable bowel syndrome, and they seem to be especially helpful for bloating and flatulence. And there are some probiotics that actually help a lot of IBS symptoms. But I would emphasize the point that Pali has just made, you know, just don't take a probiotic for a day and expect a miracle; you should give them an adequate trial and the research would say that that should be at least four weeks.

Now the question I'm always asked, because we've done research in probiotics, is what's the best one? And I can't give you a definitive answer here because it will depend on where you live and what probiotics are available to you and what particular symptoms you have. But some might be better for diarrhea, some might be better for constipation.

But what I would say is to use products from a reputable manufacturer and to look for evidence from them that this particular product actually helps irritable bowel syndrome. Another important point to make is that if they do work you need to keep taking them, because once you stop you lose the benefit.

And there's one other point I'd like to make about what Pali said about diet, and I think it's a very important one, and that is it's sometimes helpful for patients to keep a food diary. And it's sometimes as helpful when they see; well actually it doesn't matter what they eat, they get worse, because they can't identify a particular food. And there what we're probably dealing with is normal physiology, that when we all eat we stimulate the bowel, and we stimulate the bowel because the main function of the bowel is to deal with food. So whether it's motility or secretion or any aspect of bowel function is stimulated by eating, so your symptoms get worse. And it's very helpful for the patient to say, "Well actually I thought it was this causing it, but then actually everything causes it," and that can often be just as helpful as is the case you mentioned, where they identify particular food that's a problem and then they try excluding that.

But if the food diary is associated with the life events diary where they can actually see that there may be other factors, like the bank manager telling them that they have overdrawn. That's right.

Or some other life event, which relates the stress-related factors.

Absolutely. I think that's absolutely key. And that's what I meant really, is that is having a food diary and then relating that to these episodes or bouts or attacks of symptoms that I've mentioned.

SEGMENT 4

We've had a very interesting and useful discussion about the role of diet in the management of sufferers of IBS symptoms. But I'd like to turn now to Pali Hungin as our general practice representative here, and ask him how he starts the management of his sufferer with IBS symptoms.

Thank you, Richard. I think that the management has to be predicated on a good shared understanding between the doctor and the patient. They have to be speaking from the same sheet. I think it's important that the patient has a good understanding of what the problem is and what the likely direction is going to be in terms of management. From the point of view of the patient's overall care, it's important that the specific concerns and fears are addressed, and I think it's important to get out of the way, for example, a fear that there might be a cancer or something else that's bothering the patient.

After that, within the dialogue, which includes good quality education information for the patient, one can then start to tackle each problem in its own way. In my view the most pressing problems, or the most pressing symptoms, ought to be dealt with first. These could be different; these might actually not be directly related to the gastrointestinal symptom; it could be say poor sleep or anxiety. On the other hand the patient might have specific gastrointestinal symptoms which are a problem. The discomfort could be a problem, or the bloating. So my own approach is to ensure that we are working on the most troublesome problem and tackling it either by way of lifestyle changes or appropriate therapies.

So when you are thinking about appropriate therapies are you looking at a particular symptom or trying to embrace a number of symptoms with one treatment, and how do you assess the sorts of

benefits and outcomes with the treatments that are currently available?

I think it's important for the therapy to be geared to the specific symptom. So for example, if a patient has a great deal of diarrhea or looseness which is causing the problem, that must be tackled with an appropriate anti-diarrheal. If it's constipation then medications or therapies that are specific to that. The same thing for bloating, for example, where one might use an anti-spasmodic. These do work in specific people fairly well. And for other symptoms that might be associated with IBS, again one will try to target things as closely as possible. We've talked about fiber, and this might be something that's appropriate for some people. But I think we should be clear about this, there's no global approach, and when I was less informed about irritable bowel syndrome I was terribly guilty of using what I would call "blunderbuss" therapy, a combination of anti-spasmodics, fiber, and sometimes anti-diarrheals, all in the same patient, without an understanding or an appreciation of what the chief problem was that I was trying to deal with and what it was the patient wanted me to deal with.

Does a specialist have a better armamentarium for managing these symptoms Anton?

As Pali has highlighted, the key issue is to focus on the most intrusive symptom. And if we take those sort of in turn really, so pain is often, is sort of a hallmark symptom, and once antispasmodic-type therapies have been tried unsuccessfully and patients are being seen, what we use quite successfully in a lot of patients is low doses of drugs called tricyclic antidepressants. These are drugs, as you know, which were used initially in much larger higher doses for treating anxiety and depression, but we use them in very modest doses in the gut. And sometimes a fifth or a tenth of the dose even the psychiatrists use. And we use those specifically for their effect on the gut, but of course they can have the side effect, unfortunately, of making some people a bit drowsy. The fact that it works in the gut doesn't stop it working to make people sleepy. But sometimes, as Pali said, that's a good thing; people can't sleep, and sometimes those so-called side effects are actually rather helpful.

But these drugs like amitriptyline or nortriptyline, as they're called, can be very helpful for some individuals. And so I think we're basically saying the same thing; it's some, it's not everyone. There's no blanket therapy. But as it's been alluded to, this is a sort of multifaceted problem.

And some concern for tricyclics, of course if you have a constipation-predominant IBS.

Absolutely. So these drugs do have another side effect, which we don't often want, which is to slow the bowel down. And so if your problem is also pain and constipation, that's not a good agent. But again, it's about focusing it around specific therapies.

Drugs that you would perhaps see contraindicated in this situation, opiates, for example?

Absolutely. I would also strongly counsel, it's not patients, it's doctors who do this, let's face it, is against ever starting any drug which has a so-called opioid or opiate effect, so members of the codeine family, members of the morphine family. These are not helpful drugs; in fact they're actively unhelpful drugs for the patient with IBS, and they really should be resisted.

Now what about some of the other areas that perhaps some people would see as being fringe: hypnotherapy and psychotherapy and so on? There's some interesting literature here.

There's enormously important literature here. And I think, you know, I think as we've said several times now, this notion that the brain and the gut are separate things is erroneous, certainly as far as IBS patients are concerned. And so-called fringe therapies, if we're talking about psychological therapy or hypnotherapy, they are not fringe by any manner of means; these are mainstream therapies. The challenge is that they aren't widely available; these are often quite expensive to healthcare systems and their lack of availability doesn't make them fringe. The fact is that for some individuals, again, they are absolutely central to how patients can get better, and they offer a chance to tackle more than just the one key symptom. That's what's attractive about these therapies; there's a strong evidence base to support their use. They are also cost-effective, but they are hard to access for some of us in our healthcare systems.

But for a condition that may be life-long how do we see them fitting into that setting?

What has emerged over the last 20-30 years of research into these forms of therapy is that it's about having the right therapist and the right patient, getting a good interaction together. But if you can get that sort of key in the door, it can cause a result in long-term

benefits The improvements can be maintained over the long-term. Occasionally, patients need sort of top-off sessions, as it were, but it's important that good therapy involves having a relationship which allows patients to have a sort of revolving door to come back when needed. You can have your course of treatment and that's finite. And so hypnotherapy has a proven evidence base, cognitive behavioral therapy. Those are the two kernel therapies, but there are other forms of intervention.

So as a final intervention there, biofeedback, is that better for people with sort of real rectal symptoms and difficulty with evacuation and so on?

So with the therapies we've mentioned today have been sort of primarily sort of working in the big brain, there are therapies which work on the sort of the local, on the pelvic floor area. So for those patients who have so-called rectal symptoms, where they don't feel they adequately empty, where they don't empty out very successfully themselves, where they strain to do so, getting the patient to be able to learn how to use what's down there, to sense what's down there appropriately, to be able to void more completely and satisfactorily, that can be done as a learning therapy with a one-on-one therapist sometimes using very simple equipment to help the patient become aware of what these kind of mysterious functions in our lower bowel are. That can be very effective, again, long-term therapy. So it's essentially around tailoring the patient's symptoms to the therapy available.

But I think the limitation of these therapies, whether it's cognitive behavioral therapy, hypnotherapy, or biofeedback, which Anton has mentioned, is not their efficacy, which is proven; it's their availability.

And because I think it is clear that just having any type of hypnosis is not going to work; it needs to be gut-directed hypnotherapy by an experienced practitioner.

Yes, I mean but it's resource-intensive and not widely available.

It's resource-intensive, it's intensive for the patient, and unfortunately it's not widely available.

So let's go back then to pharmacotherapy. We've had some tantalizing promise in recent years of a class of drugs which might be able to offer more than an attack on a single symptom, but to address some of the global symptoms that are related not only

perhaps to the pain, but also the hypersensitivity aspect. And so what's the promise now for new therapy in this area, Eamonn?

Well, along the way we've mentioned a number of aspects, the spasm or motility problem, in particular we've emphasized the hypersensitivity. And a lot of very good research was done on these aspects, and along the way certain molecules were identified which seem to be good targets for drugs that might diminish sensitivity of the bowel or improve or modify motility in the bowel. And several drugs were developed to target these specific molecules thought to be involved in irritable bowel syndrome. Some of these worked only in diarrhea-type irritable bowel syndrome, some of them worked only in constipation-type irritable bowel syndrome. But unfortunately many of these, when they came to the clinic, failed. They just were not successful. And others, unfortunately, were withdrawn because they had side effects on the heart or on other parts of the body.

But there is good news, and that is that there are some new classes of drugs perceived to offer real promise. And I would like to emphasize one particular group, which are called the chloride channel activators. And basically what these drugs do is that they increase in a very subtle way the production of chloride, sodium, and water from the bowel, which is released into the intestine and helps to lubricate the stool. One of these chloride channel drugs, which is called linaclotide, also seems to stimulate motility, and very interestingly, to reduce that gut pain or sensitivity that Pali and Anton have emphasized. And this drug has been recently introduced into several European countries, as well as North America.

But one very important point about this class of drugs, these chloride channel activators, is that they act only in the gut. They're not absorbed into circulation, so they're very well tolerated and we don't have the worries about these heart problems, etc. that have been an issue with some of these other previous compounds that I mentioned. Several trials have shown that linaclotide, if it's taken once a day, for up to six months helps the main symptoms of irritable bowel syndrome as well as providing overall relief and actually even improving quality of life of the sufferer, but for the sufferer with irritable bowel syndrome with constipation. This will not be used in all patients with IBS because it works by increasing stool frequency and making the stools more soft. Obviously that's not going to work for the patient who already has diarrhea.

Well thank you, Eamonn. My colleagues have given us a very comprehensive overview of IBS and how sufferers can be helped by better understanding their condition and what to discuss with their healthcare provider. But one important question that sufferers will always have is “What’s going to happen to me over time?” And the news there is that about two-thirds of people who have IBS symptoms will continue pretty much fluctuating with their abdominal pain and discomfort and their altered bowel habit over time. And that that can be well managed and give them a good daily quality of life if they attend to lifestyle and diet, along the lines that has been discussed today.

Appropriate medications, used as we’ve heard, both in the primary care and specialist setting, can control individual symptoms and don’t necessarily need to be taken on a long-term regular basis but, rather, intermittently address symptoms when they become difficult to manage. There’s possibly up to a third of individuals who will improve with respect to their symptoms over time, and indeed, a small proportion of those may even get better and not have the recurrences.

But the really important point to get across from our discussions today are that IBS does not lead to cancer and is not associated with cancer in any way. We’ve heard that the sufferer should embrace the condition; it is a real condition. We have emphasized that it will not turn into anything else. The important messages we heard, particularly from Pali Hungin, is that the patient needs to understand their condition, and if they have continuing anxiety about it, joining a support group may be particularly helpful. They can update themselves on a regular basis through a reputable website and look after the lifestyle and diet and maintain the changes which they have made.

Keeping in touch with their physician is important, and I think physicians also should see patients on a regular, perhaps annual basis. One must, again, reiterate how the sufferer should make sure that their healthcare provider is up to date with any changes that may occur in their symptoms. These may signal the need for a further intervention of some kind if symptoms have become worse or become worrisome in any way. And everybody who presents with these IBS symptoms is different and the approach needs to be individualized.

Good news in all this is you’re not alone. Irritable bowel syndrome is taken seriously by clinicians, as we’ve heard today; by researchers. There’s a lot of exciting new information by those

who fund research, particularly in pharmaceutical industry, and by society and healthcare providers.

So let's just go for a final word from my colleagues, from Pali Hungin.

I think IBS is an important condition for which physicians, family doctors, ought to prepare themselves in terms of current management, future developments. I think there's a great deal of promise there for the future.

Anton?

For me, I think there is good news around IBS. This isn't a sort of a heartsink, or shouldn't be a heartsink for any doctor. And what's exciting is that it's about the things that we like as doctors and nurses; we like to communicate with the patients, we like to know their lives. And that's what's lovely about this. But it's now being allied to an increasing armamentarium of drugs and other therapies which we have available to us. So I think it's a positive diagnosis and a positive therapeutic message we can give, rather than doom and gloom.

Eamonn?

Well I think the exciting thing about irritable bowel syndrome is what you just said, it's being taken seriously. And for me, as somebody who does research in irritable bowel syndrome, the fact that somebody is doing research in irritable bowel syndrome is totally different from when I started out in gastroenterology. So I have great optimism for the future of irritable bowel syndrome, and I think slowly but surely we are identifying causes for irritable bowel syndrome, and I think ultimately we will actually have several explanations for irritable bowel syndrome. So I am very optimistic.

On that very positive note I am delighted to thank my colleagues on your behalf. I think we've had a wonderful symposium and we very much hope that this is of value to all of you. Thank you for your attention.
