

## CHAPTER 1

# Introduction

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### OVERVIEW

- Medically unexplained symptoms (MUS) are characterised by disturbances of function – including physiological, neurological and cognitive processes
- Using what is currently known about disturbed function, it is possible to develop coherent and plausible models of conditions in order to explain what is going on to patients
- Sharing explanations and understanding concerns allows the doctor and patient to work together. Describing symptoms as disorders of function is an acceptable way of doing this

### Aim

This book aims to help general practitioners (GPs) and other generalists to understand and treat conditions associated with symptoms that appear not to be caused by physical disease. This lack of explanation due to visible pathology means they are often called medically unexplained symptoms (MUS). This book takes the view that MUS are disorders of function, rather than structure, and so the book will refer to them as functional symptoms. Although we do not fully understand the nature of the disturbed function, research is making this clearer and several mechanisms, including physiological, neurological and cognitive processes play a part in symptoms. This book also takes the view that by using what is currently known about functional symptoms, it is possible to develop coherent and plausible models to explain what is going on. This book aims to help doctors explain the medically unexplained – both to themselves and to their patients.

Symptoms that appear not to be caused by physical disease are a challenge to doctors and patients. Both have to simultaneously consider the possibility of serious illness (either physical or mental) while seeking to contain and reduce the symptoms and the threat they represent. This is not easy. In order to deal with MUS, and the patients who present with them, doctors need to apply a range of clinical skills: from empathic history taking and

focused examination, through careful assessment of probabilities, to communication, explanation and – sometimes – support. This book assumes you already have those skills to some extent; it aims to show ways of using, and developing, them in order to deal with these common problems.

### An approach to MUS

The *ABC of Medically Unexplained Symptoms* is not a book about the somatisation of mental distress from a psychoanalytic perspective. It does not take the view that unexplained symptoms are a way of communicating need in people who cannot otherwise do so. Rather it takes a mechanistic view of symptoms as the result of interacting processes – some physiological, some neuropsychological – that lead to persistent unpleasant feelings and distress. This approach is similar to that used in pain medicine, with which it has much in common; indeed many unexplained symptoms and syndromes include pain.

This introductory chapter addresses three questions: what do we mean by medically unexplained symptoms; what causes medically unexplained symptoms; and what should we call medically unexplained symptoms?

### What do we mean by medically unexplained symptoms?

The simple answer to this question is ‘physical symptoms that cannot be explained by disease’, but it has several problems. First, this book is written largely from a primary care perspective and although it may be that every possible disease has been ruled out in tertiary care, this is not often the case in primary care. Furthermore, not all ‘diseases’ have consistent pathology – migraine is an excellent example of a syndrome that we have kept on the ‘explained’ side of the dividing line between explained and medically unexplained symptoms but where the problem is one of disturbed function rather than structure. Even persistent back pain, which initially seems an obvious ‘explained’ symptom, shows almost no correlation between symptom severity and structural abnormality.

Instead of this simple ‘absence of disease’ answer, it can be helpful to think of three different meanings: symptoms with low probability of disease; functional somatic syndromes; and experiencing multiple physical symptoms. This book will use

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the adjective ‘functional’ in relation to symptoms or syndromes (i.e. MUS) to mean simply that we can best understand them in terms of disturbed function without altered structure. In general it will use the term ‘organic’ to refer to conditions associated with pathological change.

### Symptoms with low probability of disease

This term has recently been introduced in an attempt to capture the uncertainty that is inherent in this field. Around 10% of patients in primary care with persistent so-called MUS eventually turn out to have an alternative diagnosis. The proportion is rather lower in some forms of secondary care but nonetheless all doctors will have seen a patient whom they originally thought had a functional symptom but turned out to have a disease. We believe that the concept of symptoms with low probability of disease is useful though, as it can be applied to a patient with positive pointers to a functional disorder and with no red flags for serious illness to indicate a ‘working diagnosis’. Chapters 3 and 4 describe the recognition of physical illness and emotional disorders in patients with MUS.

### Functional somatic syndromes

The common functional physical symptoms – fatigue, headache, light-headedness, headache, palpitations, chest pain, nausea, bloating, abdominal pain, musculoskeletal pain and weakness often occur together. Some of these clusters – particularly when they present to a given clinical specialty – are commonly grouped together as a syndrome. So gastroenterology has the irritable bowel syndrome (IBS), rheumatology has chronic widespread pain and fibromyalgia, and gynaecologists have chronic pelvic pain. As Figure 1.1 shows, and as described further in Chapter 2, all these symptoms overlap; to the extent that some experts argue that all the syndromes represent facets of a single disorder.

In practical terms, however, the syndrome labels are here to stay and they often represent useful diagnostic labels or categories. The common syndromes are covered in this book, and when we use

the term ‘MUS’, it includes these defined syndromes as well as less clearly categorised symptoms.

### Experiencing multiple physical symptoms

As Chapter 2 describes, everyone has some functional symptoms at some point in their life. What matters is that some patients have multiple physical symptoms that cause distress and that have an impact in terms of restricting behaviour or seeking medical attention. This triad of multiple symptoms, distress and impact has received various names including somatisation (but it then gets confused with the psychoanalytic concept) and most recently a proposed new term ‘bodily distress disorder’. At the moment there is no widely acceptable name for this phenomenon, but the triad of multiple symptoms (Box 1.1), distress and impact seems to describe an important group of patients well.

#### Box 1.1 The triad of experiencing multiple symptoms

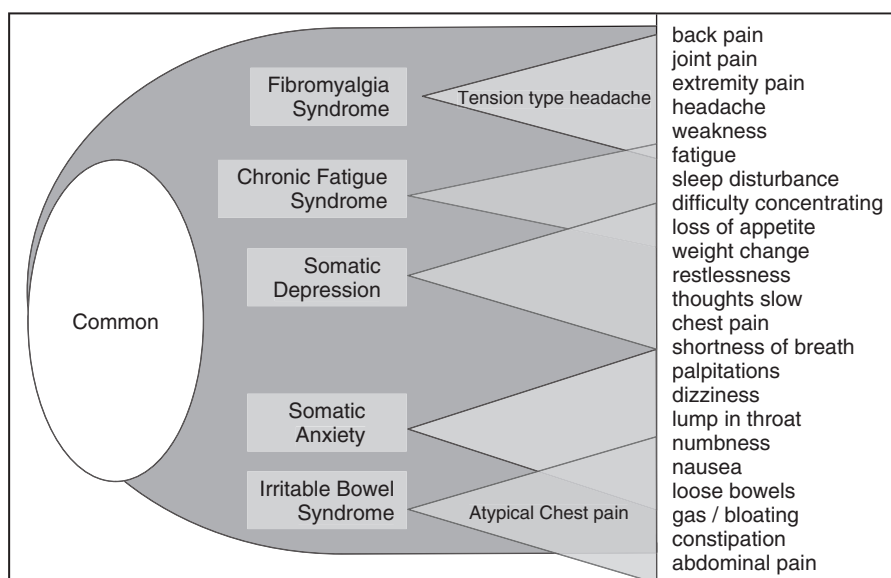
- Experiencing multiple symptoms
- Distress because of symptoms
- Impact on activities or healthcare seeking because of symptoms

### What causes MUS?

The simple answer is ‘we don’t know’ – because otherwise they wouldn’t be medically unexplained symptoms. But actually we know quite a bit about the factors that predispose patients to MUS, the mechanisms that give rise to symptoms; the cognitive processes by which they are appraised and the processes that perpetuate them.

### Predisposing factors

If you have the good fortune to have been born with the right genes, brought up in an emotionally secure family, protected from



**Figure 1.1** Overlap of medically unexplained symptoms.

poverty, illness and abuse, and have a fulfilling role in life then your chances of problems with MUS (and most other conditions) are reduced. However for most people it is difficult to argue that one factor is more important than another. Depression and anxiety undoubtedly predispose to future MUS, and conversely MUS predispose to future depression and anxiety.

### Biological mechanisms

Given that there is no obvious disorder of structure, it is reasonable – and acceptable – to talk of MUS as disorders of function and you will find this sort of language in several of the chapters. As well as more obvious changes of function such as gut motility or heart rate, subtle changes in autonomic function are common in patients with MUS. Some form of hypothalamic–pituitary axis dysfunction appears to be present in many patients with fatigue and chronic pain and there is mounting evidence for the effect of stress on immune regulation.

Central sensitisation to pain is an increasingly recognised and understood process in all forms of chronic pain (whether ‘explained’ or not). It is characterised by heightened perception of, and distress from, a range of sensory inputs and includes the two components hyperalgesia (heightened perception of painful stimuli) and allodynia (pain arising from non-painful stimuli) illustrated in Figure 1.2. Neuroimaging is beginning to highlight characteristic areas of under- and overactivity as symptoms are processed in the brain. This is an active field of research and it seems inevitable that new physical mechanisms will be uncovered with time.

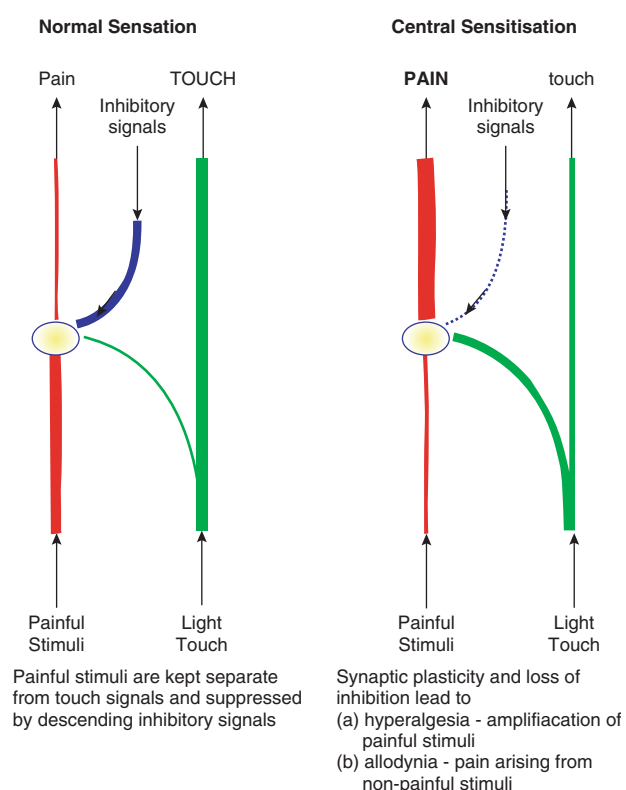


Figure 1.2 Sensory pathways in normal sensation and central sensitisation.

### Symptom awareness and appraisal

It is important to recognise that symptoms feel the same to the patient, whether they are ‘explained’ or ‘medically unexplained’. This is important to convey to patients who sometimes think that if no physical cause can be found then the doctor thinks they are imagining it – and that, somehow, functional symptoms would feel different.

The same centres in the brain are activated regardless of the origin of pain and detailed studies of the experience of symptoms show that distress from and response to symptoms follow similar patterns, regardless of cause. The experience of symptoms is a complex phenomenon: incoming stimuli to the brain pass through a series of stages before they reach awareness: these are outlined in Box 1.2.

#### Box 1.2 Stages in the response to an incoming unpleasant stimulus

- 1 *Reflex expression of emotion*: for example fear or disgust. This triggering is involuntary and emotion itself causes its own actions.
- 2 *Checking against memory*: by the time a person becomes aware of a symptom, they are already experiencing the emotional response and have compared it *with* other experiences.
- 3 *Deciding what to do*: this stage of symptom appraisal means that once aware of something we already have an idea *of* what to do. Often it is just nothing, but some patients have particular responses, with perfectly rational reasons.

If you think this sounds a bit improbable, consider the account of anxious people who have noticed extrasystoles when resting. The awareness of even a single extra heartbeat already comes with a sense of anxiety and ‘oh no, not again, I need to get out of here’.

### Perpetuating factors

A common way of making sense of functional symptoms is to consider perpetuating cycles. Figure 1.3 shows two examples: in each case the cycle is triggered by a short-lived incident (for instance a virus infection in the fatigue cycle) but then may become self-perpetuating. The second example is based on the cognitive model of panic but is applicable to other symptoms. It includes an extra loop of increased awareness that means that

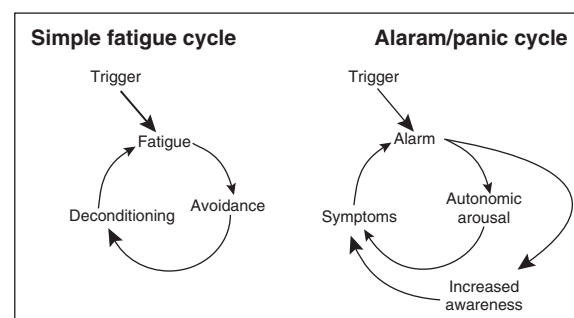
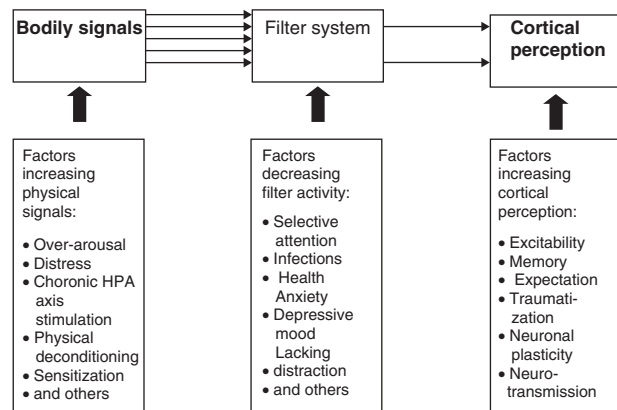


Figure 1.3 Cycles of perpetuating processes.



**Figure 1.4** A filter model for Medically unexplained symptoms. HPA, hypothalamic–pituitary–adrenal. Reprinted from Rief W and Broadbent E. Explaining medically unexplained symptoms – models and mechanisms. *Clinical Psychology Review* **27** (2007) 821–841. Copyright © 2007, with permission from Elsevier.

minor autonomic changes, which might otherwise go unnoticed, are perceived and thus regarded as abnormal and hence processed as symptoms, generating further alarm. This model is particularly applicable to a range of autonomic symptoms such as palpitations or lightheadedness.

### An integrated model

Figure 1.4 shows a model that integrates predisposing factors, causal mechanisms, symptom appraisal and perpetuating factors. It uses the idea of filters in a way that is analogous to the gate theory of pain. This model is a coherent attempt to bring together multiple factors and also has the advantage that problems can be explained as failure of the filters (or ‘barriers’). Many patients find ‘your pain (or symptom) barriers aren’t working’ to be less judgemental than ‘your nerves have become more sensitive’. Repairing these barriers then becomes a useful objective for therapeutic work.

### What should we call MUS?

The simple answer to this is ‘whatever you and your patient find useful’. There are no good terms here, just less bad ones. In the rankings of things not to say to patients, ‘All in the mind’ and ‘psychosomatic’ are the worst. They have a Number Needed to Offend of only 2 or 3!

The symptom syndromes can be a valuable way of legitimising symptoms for patients, particularly when the symptoms have been present for several months. When symptoms are more recent, it is

still usually acceptable to talk about functional symptoms – as long as you indicate that you are using that term because of features of disturbed bodily function.

### How to use this book

The chapters of this book should be considered as being in three sections. The first (Chapters 1–6) represents an introduction and overview, with chapters about the epidemiology and impact of MUS, suspecting physical and mental illness and a consideration of some of the specific problems for doctors that MUS brings. It ends with a chapter outlining a set of principles for the management of patients with MUS. This section is designed to be read through, reflectively. Its contents are at the heart of clinical practice and comprise appropriate material for self-directed learning in terms of appraisal and revalidation.

The second part of the book (Chapters 7–13) covers commonly occurring MUS in a range of specialties. These are designed to be dipped into, on an as-needed basis.

The final section (Chapters 14–18) considers treatment from a range of perspectives. Like the first section of the book, it is designed to be read through and digested. It contains tips for generalists as well as descriptions of the sort of things specialists will do when treating the generalist’s patients.

You might wish to use your learning from this book as part of a personal development plan towards revalidation. In order to help with this, and to increase its impact, the Appendix suggests points for reflection and audit based on each chapter that represent a starting point for further thought.

This book cannot tell you everything you might want to know about MUS, but hopefully it combines an overall approach that is practical and useful, with sufficient information about specific conditions to help you manage them well.

### Further reading

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