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(Room 4)

16:30 - 17:25 WS #49: Somatiform Disorders

17:35 - 18:30 WS #59: Somatiform Disorders (Repeated)

# Somatoform disorders

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# Overview

- Taxonomy and spectrum
- General principles
- Investigations
- Management approach
- Diagnostic conundrums
- Treatments for specific disorders

# Taxonomy

- Symptoms clearly attributable to a specific medical disease
  - Dyspnoea in asthma; chest pain in AMI
- Symptom only diagnoses
  - Low back pain, dizziness, headache
- Somatic symptoms in anxiety and depression
- Functional somatic syndromes
  - Fibromyalgia, irritable bowel syndrome, chronic fatigue syndrome
- Medically unexplained symptoms associated with dysfunctional illness behaviour
  - Somatoform disorders

# Definition

- Group of disorders that feature symptoms (eg pain, nausea, dizziness) and signs for which an adequate biomedical explanation cannot be found
- Patients convinced they are suffering from a presumably untreated bodily derangement

# Somatoform disorder

## Other synonyms

- Somatisation disorder
- Body dysmorphic disorder
- Hysteria “wandering womb”
- Psychogenic symptoms
- Non-organic symptoms
- Medically unexplained symptoms
- Conversion disorder
- Functional neurological symptoms
- Functional somatic syndromes
- Hypochondriasis
- Pain disorder

# Somatoform disorder

## Somatoform Disorders

### Somatization Disorders

- Vague, dramatized/exaggerated; Chronic, onset before 30; Pain 4 different sites; GI symptoms; Sexual symptoms; neurologic symptoms; Anxiety/depression frequent; SI/attempts not uncommon

### Pain Disorder

- severe/prolonged/impairing; dx when psychologic etiology (stress at onset); primary gain/secondary gain

### Hypochondriasis

- unrealistic/inaccurate interpretation preoccupation has serious disease; specific; doctor shop; impaired functioning

### Conversion Disorder

- Neurologic disease – paralysis, aphonia, sz, coordination, swallowing, urinary retention, akinesia, blindness, deafness, double vision, anosmia, no pain sensation, hallucinations, pseudocyesis (pregnancy); primary/secondary gain; "la belle indifference"; symptoms resolve within weeks – 20-25% recurrence within 1 year; blindness, aphonia, paralysis good prognosis – sz/tremor poor prognosis

### Body Dysmorphic Disorder

- Preoccupied with physical appearance with obsessive behaviors aka Dysmorphophobia; exaggerated belief body is deformed/defective; depression and OCD common; functional impairment social/occupational; plastic surgery/dermatology; delusional thinking; mono-symptomatic hypo

# Somatoform disorder

- Irritable bowel syndrome (IBS)
- Chronic fatigue syndrome (CFS)
- Fibromyalgia (FMS)
- Multiple chemical sensitivity
- Nonspecific chest pain
- Premenstrual syndrome
- Non-ulcer dyspepsia
- Repetitive strain injury
- Tension headache
- Temporomandibular joint disorder
- Atypical facial pain
- Hyperventilation syndrome
- Globus syndrome
- Sick building syndrome
- Chronic pelvic pain
- Chronic whiplash syndrome
- Chronic Lyme disease
- Silicone breast implant effects
- Candidiosis hypersensitivity
- Food “allergy”
- Gulf War syndrome
- Mitral valve prolapse
- Hypoglycaemia
- Chronic low back pain
- Dizziness
- Interstitial cystitis
- Tinnitus
- Pseudoseizures
- Pseudostroke
- Insomnia

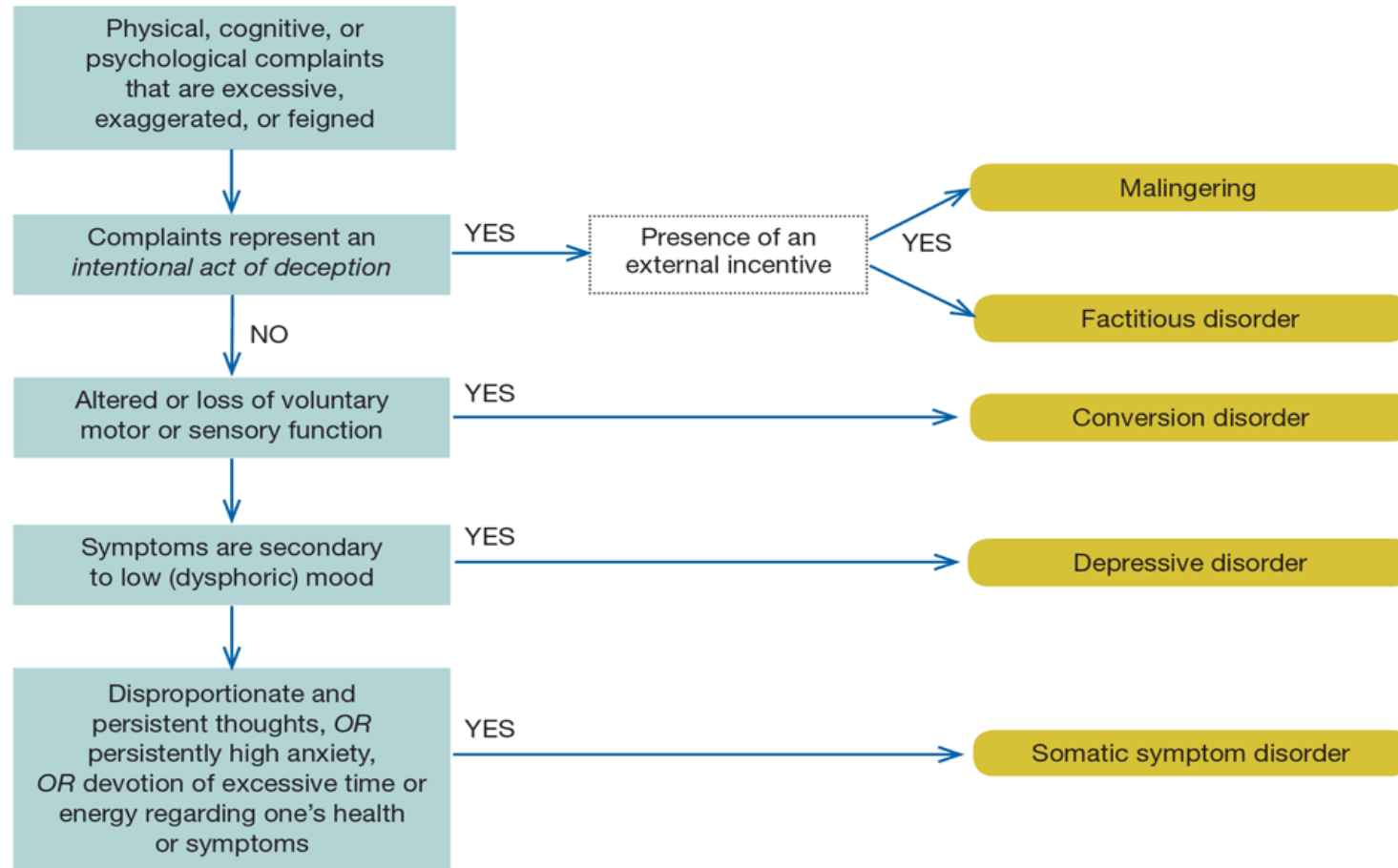
# Somatoform disorder

| TABLE DSM diagnostic changes in classifying the somatizing disorders |                                                                        |
|----------------------------------------------------------------------|------------------------------------------------------------------------|
| DSM-IV                                                               | DSM-5                                                                  |
| Somatoform and undifferentiated somatoform disorder                  | Somatic symptom disorder (mild to moderate)                            |
| Somatization disorder                                                | Somatic symptom disorder (severe and persistent > 6 months)            |
| Hypochondriasis                                                      | Illness anxiety disorder (newly named within somatic symptom disorder) |
| Conversion disorder                                                  | Conversion disorder (functional neurological disorder)                 |
| Pain disorder                                                        | Somatic symptom disorder (pain is a specifier)                         |

Note: Psychological factors affecting a medical condition and factitious disorder are now included within somatic symptom disorder.

# Somatoform disorder

**Figure. Differential diagnosis of malingering, factitious disorder, and selected related disorders**



# Associations

- Association of somatization with:
  - depressive and anxiety disorder
  - personality disorder
  - substance abuse disorder
  - personality traits
    - e.g. type D distressed personality, alexithymia
  - developmental dimensions
    - e.g. attachments, sexual abuse, neglect
  - cultural issues
    - e.g. culturally mediated attributional styles to somatic symptoms
      - Grassi et al Int Rev Psychiatry 2013

# Clinical features

- Multiple symptoms
  - pain and fatigue
- History of other functional illness
- Previous extensive normal investigations
- History of anxiety/depression
  - 1/3 patients will have co-morbid psychiatric symptoms
- Stress
  - Less than those with medically explained disease
- Reasonably sudden onset in ~50%
- Female preponderance

# Clinical features

- Symptoms that are both internally inconsistent and incongruent with any recognizable medical disease
- Physical examination
  - Principle of inconsistency
  - Not just bizarre or unexplained

# Clinical features

- History alone yields 75% of diagnostic information, with focused examination another 10-15%
- Patients show improvement rates of 50% to 75% over 2 years
  - 20% to 25% become chronic or recurrent
  - less symptom severity at baseline, sense of control over symptoms, and not attributing illness to a physical cause associated with better prognosis
    - olde Hartman et al J Psychsom Res 2009
- Serious disease that are not apparent after initial evaluation seldom emerge during long-term follow-up
  - Less than 5%

# Prevalence

- 10% of the general population
- 33% presenting with symptoms in general practice
- Over 50% in clinic populations
  - Neurology, rheumatology, GE, general medicine

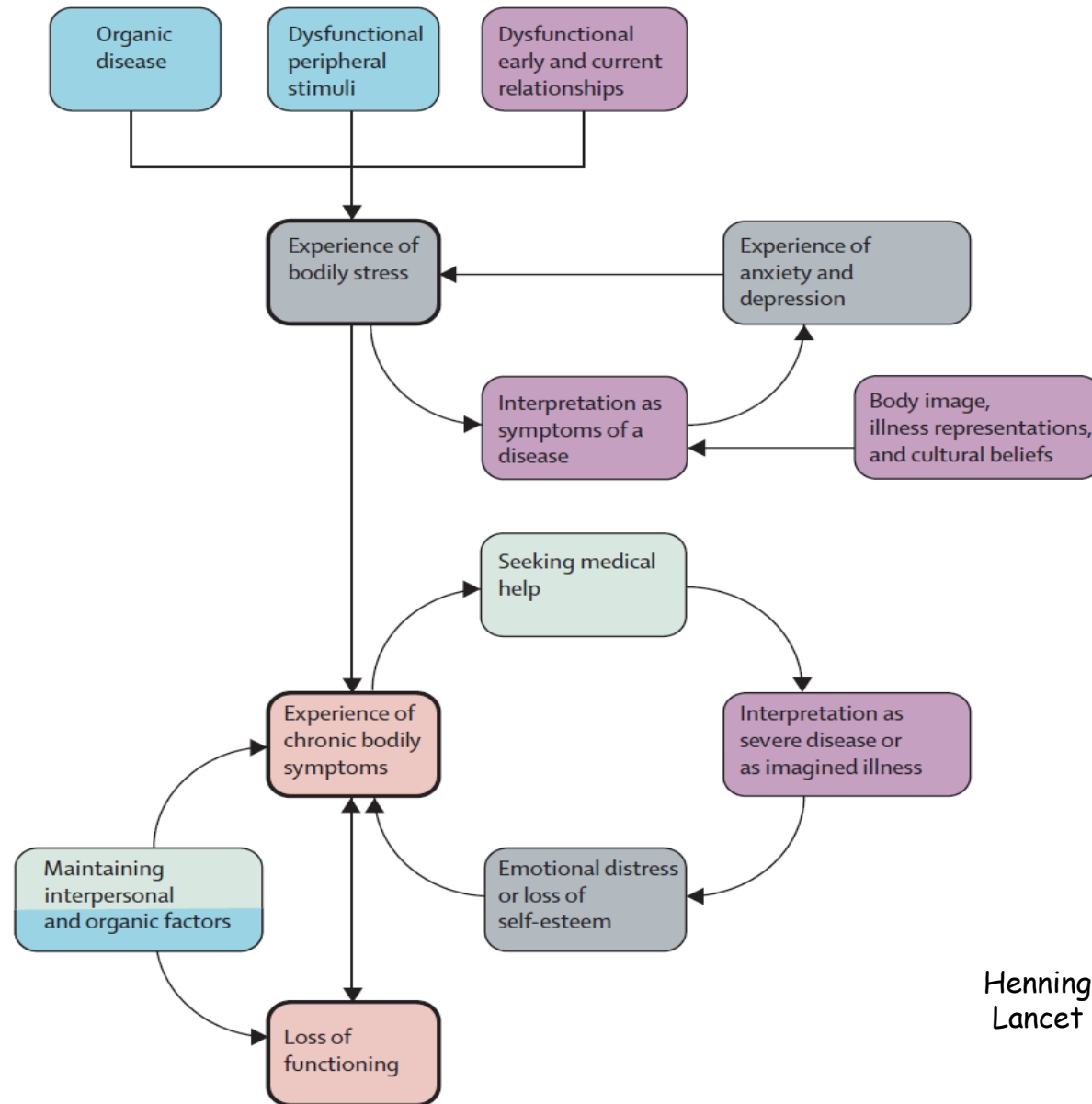
# Triggers

- After a physical injury
  - After an acute medical illness
  - After any illness associated with considerable fatigue or bed rest
  - After an anaesthetic
  - After a bad migraine
- 
- Media coverage of potentially hazardous environmental exposure
  - Mass hysteria

# Maintaining factors

- Organic co-morbidity
- Personality factors that contribute to predisposition,
- Mental co-morbidity
- Persisting organic illness attribution
- Secondary gain
- Sociocultural factors

# Conceptualisation



Henningsson et al  
Lancet 2007

# The right approach



# General principles

## Factors predisposing to management success

- Acknowledging and validating patients' sense of suffering
- Providing tangible mechanisms to explain symptoms arising from patients' expressed concerns
- Offer opportunity for linkage between psychological factors and physical mechanisms
  - discussing the possibility of a somatoform disorder early in the evaluation process
- Limiting unnecessary diagnostic tests and medical treatments
- Focusing on the management of the disorder rather than cure
- Using appropriate medications and psychotherapy
  - Strategies that cross symptom boundaries rather than those unique to specific symptoms
- Maintaining a psycho-educational and collaborative relationship
- Referring patients to mental health professionals when appropriate

# General principles

- Indicate that you believe them
  - *'I do not think you are imagining or making up your symptoms'*
- Explain what they do have
  - *'You have functional weakness'*
- Emphasise the mechanism of symptoms rather than the cause
  - *'Your nervous system is not damaged but it is not functioning properly'*
- Useful metaphors
  - *'The hardware is OK but the software is faulty'*
  - *'It is like a piano/car being out of tune'*
  - *'Part of the nervous system is playing possum'*
- Explain how the diagnosis was made
  - *'Show them signs suggesting a functional syndrome'*

# General principles

- Tell them what they don't have
  - *'You do not have MS'*
- Emphasise that it is common
- Emphasise reversibility
  - *'Because there is no damage you have the potential to get better'*
- Emphasise that self help is a key part to getting better
  - *'This is not your fault but there are things you can do to help it get better'*
- Introduce the role of depression and anxiety
  - *'If you have been feeling stressed/low/worried that can make the symptoms worse'*

# General principles

- Stop unnecessary drugs

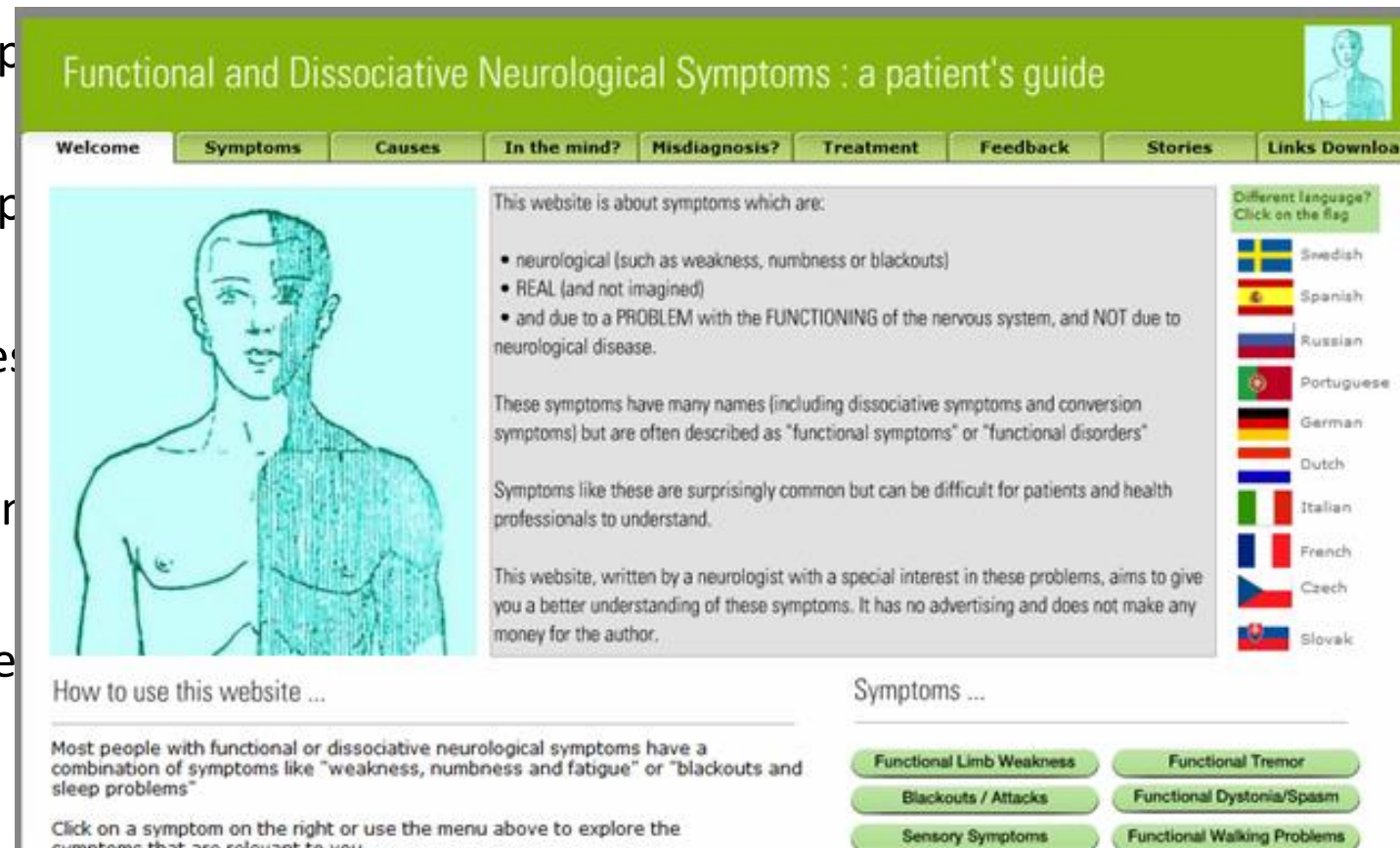
- Consider p

- Consider p

- Antidepress

- Involve far

- Use written



The screenshot shows a website titled "Functional and Dissociative Neurological Symptoms : a patient's guide". The website has a green header with a navigation menu: Welcome, Symptoms, Causes, In the mind?, Misdiagnosis?, Treatment, Feedback, Stories, and Links Download. A small icon of a person is in the top right corner. The main content area features a large illustration of a person's head and shoulders, with the right side shaded to represent symptoms. Text on the page explains that the website is about symptoms which are neurological (such as weakness, numbness or blackouts), REAL (and not imagined), and due to a PROBLEM with the FUNCTIONING of the nervous system, and NOT due to neurological disease. It also mentions that these symptoms have many names (including dissociative symptoms and conversion symptoms) but are often described as "functional symptoms" or "functional disorders". The website aims to give a better understanding of these symptoms and has no advertising. On the right side, there is a section for "Different language? Click on the flag" with flags for Swedish, Spanish, Russian, Portuguese, German, Dutch, Italian, French, Czech, and Slovak. At the bottom, there is a section titled "Symptoms ..." with buttons for Functional Limb Weakness, Functional Tremor, Blackouts / Attacks, Functional Dystonia/Spasm, Sensory Symptoms, and Functional Walking Problems. A section titled "How to use this website ..." explains that most people with functional or dissociative neurological symptoms have a combination of symptoms like "weakness, numbness and fatigue" or "blackouts and sleep problems" and encourages users to click on a symptom on the right or use the menu above to explore the symptoms that are relevant to them.

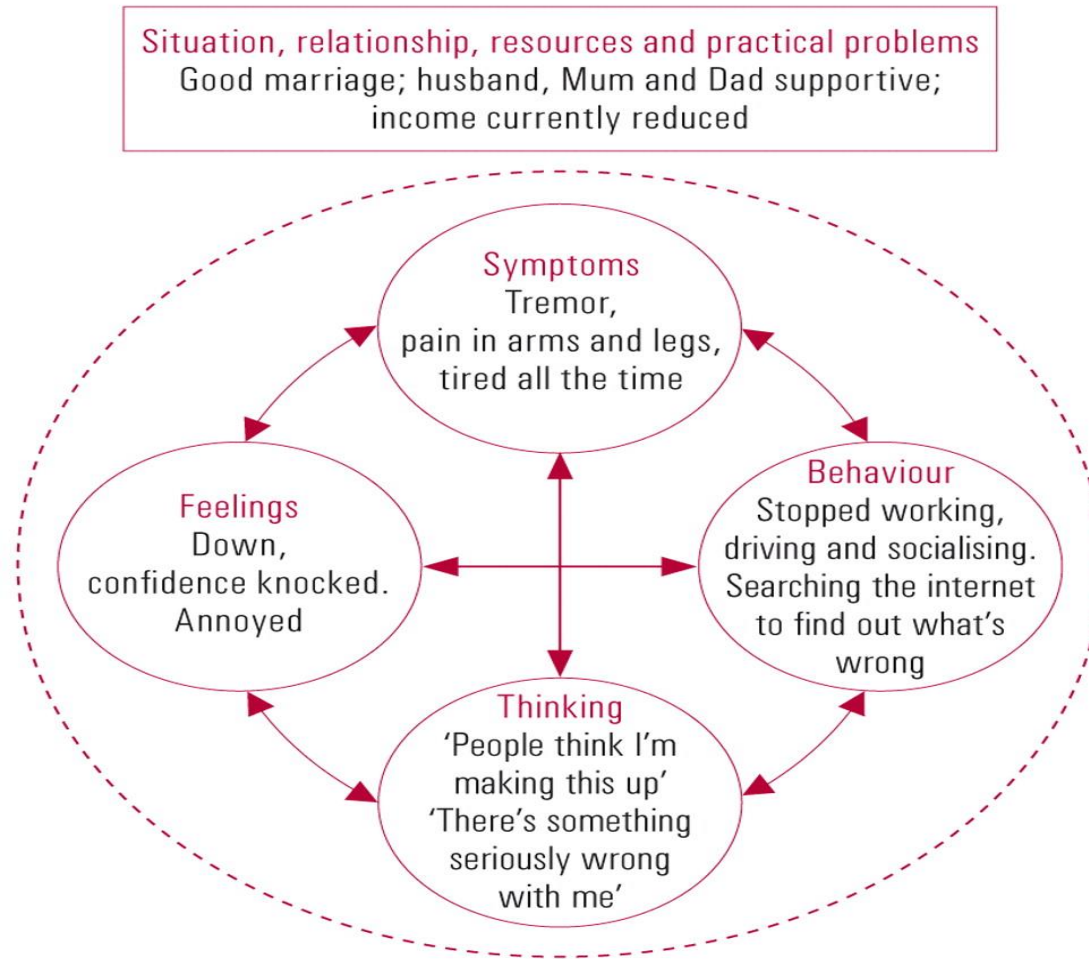
# Investigations

- In patients with low pre-test probability of disease
  - likelihood of detecting serious disease 0.5% - 3.0%
  - for test with 90% sensitivity/specificity:
    - 4 to 19 false-positives for every true positive
  - false positives may trigger additional and invasive tests
  - no benefit in reducing symptom persistence, illness worry or anxiety
    - Rolfe et al JAMA Intern Med 2013
    - Kroenke JAMA Intern Med 2013
- Beware test results that are just outside normal reference range (for that person)
  - Hb, WCC, CRP, ESR, ANA, LFTs, TFTs
- Do not do cancer screening tests
  - Esp antigen test (CAA, CEA, etc)

# Therapeutic interventions

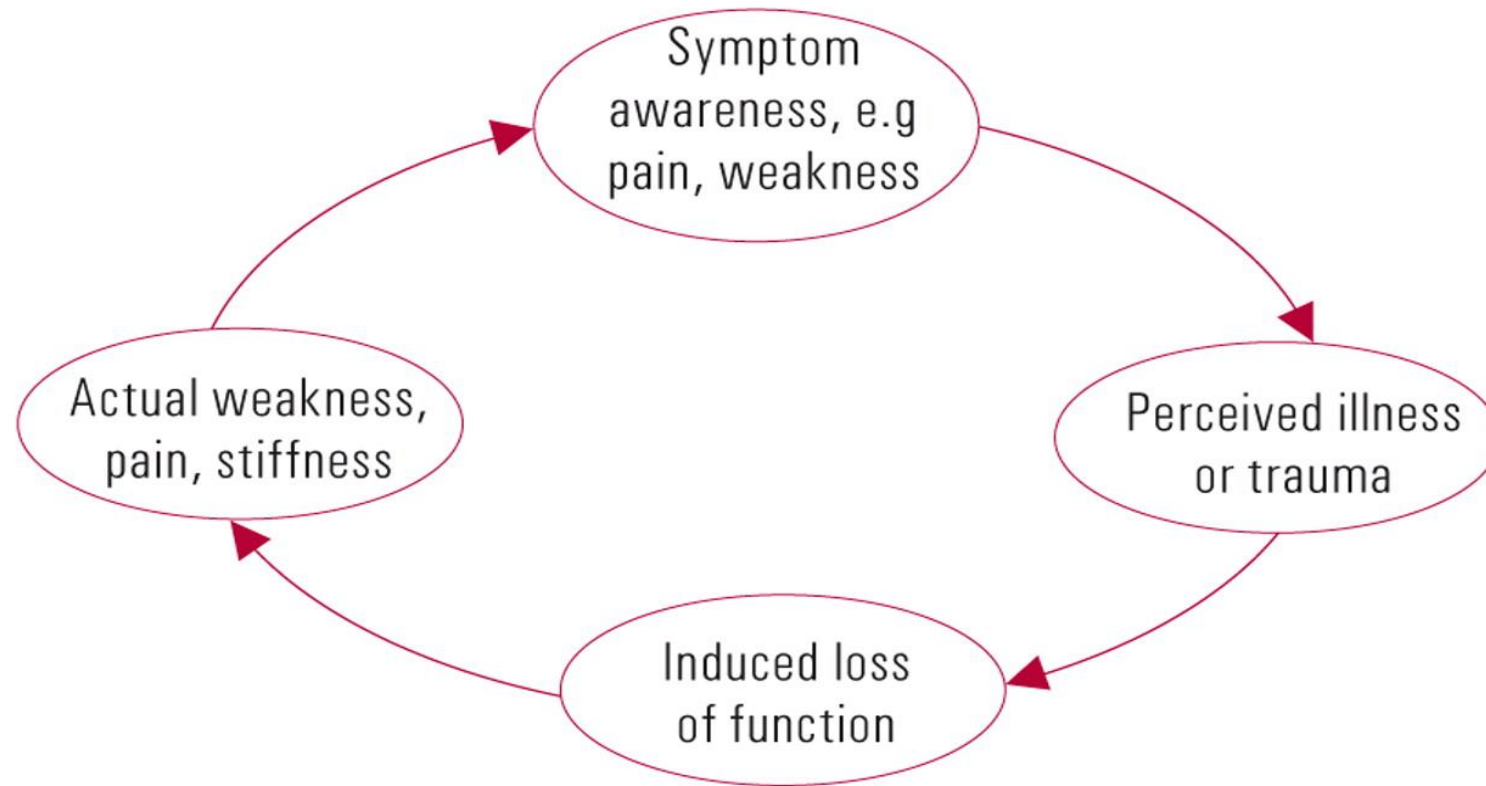
- Cognitive behavioural therapy (CBT)
  - Effective in 11 of 13 studies
- Antidepressants
  - Effective in 4 of 5 studies
    - Kroenke Psychosom Med 2007
    - Sumathipala Psychosom Med 2007
    - Jackson et al CNS Spectr 2006
- Mindfulness based therapies (MBT)
  - Clinical application of Buddhist principles involving nonjudgmental acceptance of physical or psychological distress, less rumination and catastrophisation
  - 40% mean improvement
    - Lakhan et al PLoS One 2013
- Other forms of psychotherapy
  - Abbass et al Psycho Psychosom 2009
- Exercise
  - Herring et al Arch Intern Med 2010
- Mechanisms of action:
  - Treating co-morbid depression or anxiety
  - Inhibit ascending pain pathways
  - Inhibit prefrontal cortical areas responsible for “attention” to noxious stimuli
  - Direct effects of the medications on the syndrome

# Cognitive behavioural therapy



**FIG 1** The five areas assessment model for cognitive-behavioural therapy (courtesy of C. Williams): a typical case summary.

# Cognitive behavioural therapy



**FIG 2** A 'vicious circle'.

# Cognitive behavioural therapy

## 1. Goal setting

- Long-term goals
  - Decreased symptoms; improved functioning
- Short term goals
  - Negotiations to achieve behavioural targets
    - eg walking a block each day in patient with fatigue and back pain

## 2. Achieving patient understanding and new ways of thinking about things

- Align with patient beliefs, fears, expectations

# Cognitive behavioural therapy

1. Ominous conditions have not been found
2. Surgery, further testing, and consultation not necessary
3. Problem is somatic and real
4. Their somatic diagnosis and its mechanism
5. Stress, depression, and anxiety key part of illness — and medications help
6. They are not a “psych case”
7. Narcotics and tranquilizers aggravate the problem
8. Cure is not likely — but improvement is possible

# Cognitive behavioural therapy

## 3. Obtaining a commitment

- Overview of treatment options
- Explicit commitment to work on treatment program
- Establishes patient responsibility for their health

## 4. Negotiating a specific management plan for illness behaviour change

# Cognitive behavioural therapy

1. SSRI or related medication in full doses — for depression and/or anxiety
2. Lower doses of SSRIs or other antidepressants for sleep and pain management independent of depression diagnosis
3. Taper and discontinue addicting medications — do not initiate addicting medications
4. Nonaddicting, symptomatic medications, e.g., for irritable bowel syndrome or fibromyalgia
5. Symptom diary and symptom reattribution work
6. Physical exercise, graded
7. Relaxation techniques; deep breathing or progressive muscular
8. Dietary counseling, especially around weight
9. Physical therapy/conditioning
10. Family visit with closest person to patient — possibly enlist as a co-manager
11. Referral for special, sometimes refractory problems, e.g., counseling, osteopathic manipulative therapy, psychiatry for medication recommendation
12. Management of comorbid disease problems, new and pre-existing
13. Support and common-sense advice
14. Medical investigation and referral only with objective evidence of disease or a refractory problem
15. Maximize the PPR
  - a) Elicit, understand, and address the patient's emotion
  - b) Identify and work with patient's personality characteristics
  - c) Positive regard/caring, negotiate rather than prescribe, trusting atmosphere
  - d) Encourage patient responsibility and self-management without forcing it
  - e) Provider self-awareness

PPR=physician-patient relationship

# Diagnostic conundrums

Is it syncope?

- Lifetime risk of having at least one syncopal episode: 35-50%
  - Soteviadeset *al* 2002; Serletiset *al* 2006; Ganzeboom *et al* 2006
- Prevalence of newly diagnosed psychiatric conditions in syncope [cause uncertain] versus cardiology [SVT] patients

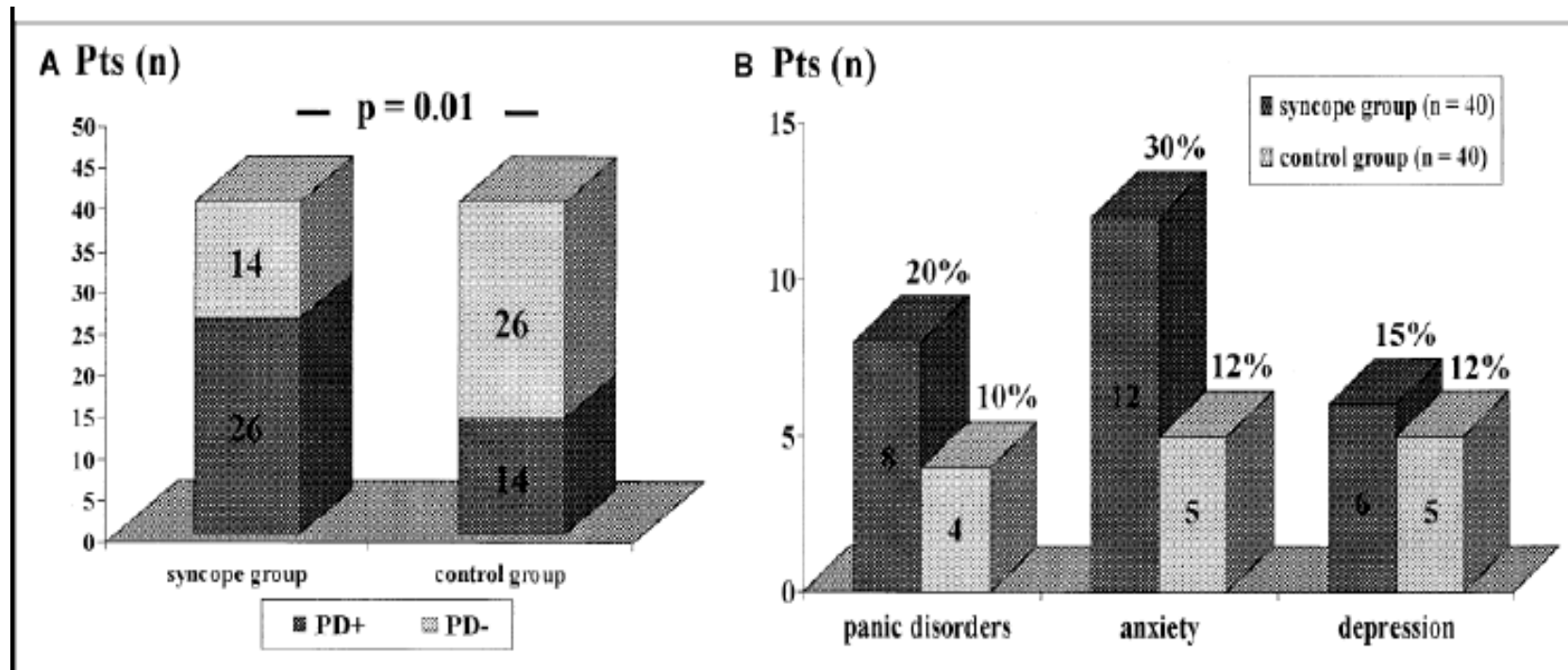


FIGURE 2. Psychiatric profile and subprofile of studied patients. A, prevalence of psychiatric disorders; B, subprofile of the study groups. PD+ = patients meeting at least 1 psychiatric disorder; PD- = patients not meeting any psychiatric disorder.

# Diagnostic conundrums

Is it syncope?

- Emotional trigger
- Frequent episodes of apparent LOC
- Multiple symptoms during presyncope
  - headache, chest pain, SOB
- Long duration of episodes
- Eyes forced shut
- “Active collapse”
- Suggestibility
- La belle indifference

# Diagnostic conundrums

Is it epilepsy?

- 1 person in every 140 has epilepsy
- Lifetime risk of having a single seizure 1 in 12
- Diagnosis of epilepsy is clinical
  - based on a detailed description of events experienced by the patient before, during and after a seizure and, more importantly, on an eyewitness account
  - examination often normal
  - laboratory tests
    - EEG: > 50% is NORMAL
    - CT scan: usually normal

# Diagnostic conundrums

Is it epilepsy?

- Misdiagnosis frequent
  - In a population survey of 40,000, 261 had a diagnosis of epilepsy
    - 23% did not have epilepsy
    - 12% uncertain/unproved
      - Scheepers et al Seizure 1998

## Consequences of misdiagnosis

- Anti-epilepsy drug side effects
- Social consequences of epilepsy
- Employment implications of epilepsy
- Risks of treating
- Repeated hospital presentations
- Health professional anxiety
- Patient and family anxiety
- Driving implications
- Economic costs

# Diagnostic conundrums

Is it epilepsy?

Epilepsy mimics

- **Syncope**
- **Non-epileptic pseudoseizures**
- **Dissociative state**
- Tonic attack of multiple sclerosis
- Episodic dyscontrol syndrome
- Movement induced dyskinesia
- Non-epileptic myoclonus
- Parasomnia
- TIA
- Migraine equivalent
- Fugue state
- Transient global amnesia
- Narcolepsy/cataplexy
- Intermittent CSF obstruction

# Diagnostic conundrums

Is it epilepsy?

|                | <b>Epilepsy</b>  | <b>Syncope</b>    |
|----------------|------------------|-------------------|
| Circumstances  | --               | +                 |
| Warning/'aura' | --(or+)          | ++                |
| Onset          | Instant          | Build-up          |
| Motor activity | Longer (minutes) | Shorter (seconds) |
| Coma/amnesia   | Long (minutes)   | Short (seconds)   |
| Complexion     | Red or blue      | Pallor ++         |
| Tongue biting  | +                | --                |
| Myalgia        | +                | --                |

# Diagnostic conundrums

Is it epilepsy?

- |                         |     |
|-------------------------|-----|
| • Myoclonic jerks       | 90% |
| • 'convulsive' syncope  |     |
| • Other motor movements | 79% |
| • Head turns            |     |
| • Oral automatisms      |     |
| • Vocalisations         | 40% |

# Diagnostic conundrums

Is it epilepsy?

Clues to pseudoseizures

- Failure to respond to anti-epilepsy medication
- Prolonged 'aura' or warning
- Unusual seizure description
- Variable seizure pattern
- Influenced by external stimuli

Video/EEG monitoring

Direct observation

Indirect observation

# Diagnostic conundrums

Is it epilepsy?



# Diagnostic conundrums

Is it paresis?

- Variable loss of function
- Weakness with normal tone and reflexes
- Collapsing weakness
- Extreme slowness of movement
- Global pattern of weakness
  - inverted pyramidal distribution
- Positive signs of inconsistency using the involuntary synergistic oppositional movement of the paretic limb

# Diagnostic conundrums

Is it paresis?



**Figure 1a:** Patient is asked to press the weak right leg down forcefully - no downward pressure felt under the right heel



**Figure 1b:** Patient is asked to raise the normal left leg against resistance – downward pressure felt under the right heel

Hoover's sign

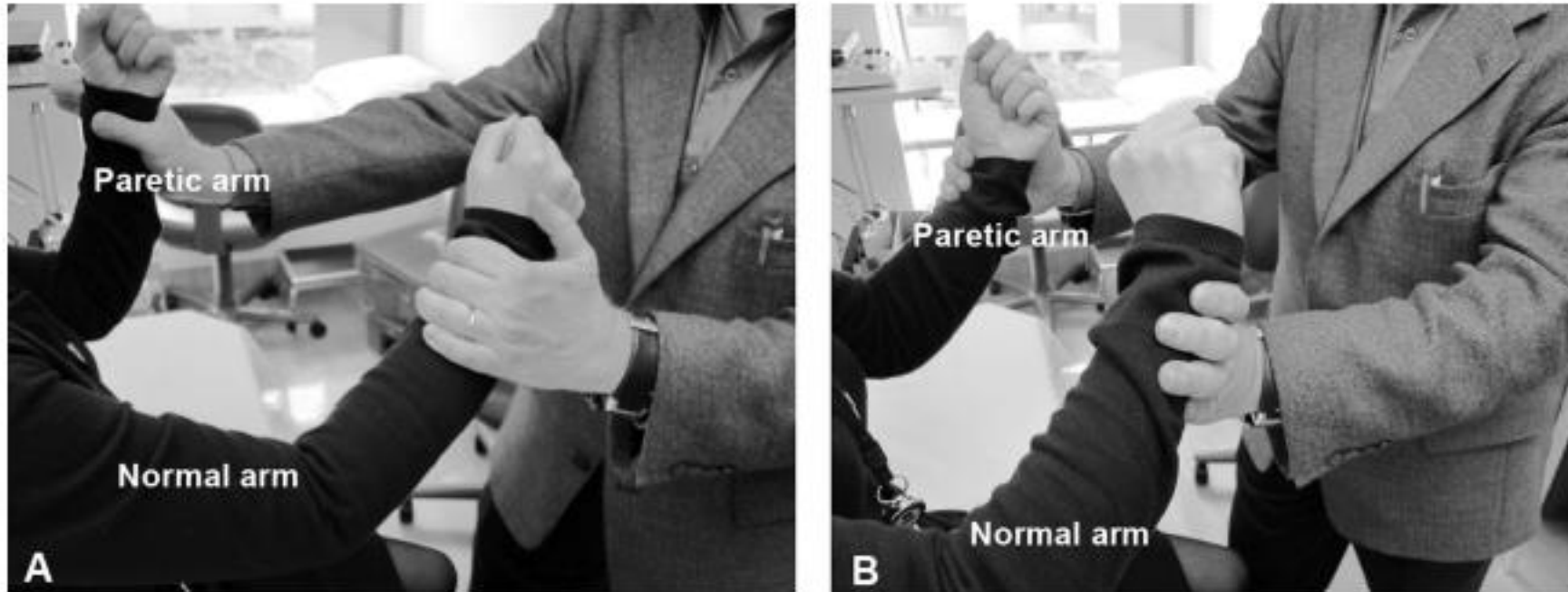


*J. Edgar Hoover*

JAMA 1908

# Diagnostic conundrums

Is it paresis?



## Elbow Flex-ex

While testing good arm flex/extend test opposite power in paretic arm  
Functional weak arm greater or normal strength compared with usual testing

23 patients with no complaint of arm weakness vs 31 patients with unilateral arm weakness (10 with non-organic weakness; 21 with organic weakness)  
- elbow flex-ex sign correctly identified cause of weakness in all cases

# Diagnostic conundrums

Is it paresis?

- Apparent facial weakness due to muscle contraction
  - Associated jaw deviation and tongue deviation towards the weak side of face



Courtesy Dr Suzanne Busch

# Diagnostic conundrums

Is it weakness?

## Mimics of functional weakness

- Dystonia



Courtesy Dr Suzanne Busch

# Diagnostic conundrums

Is it weakness?

## Mimics of functional weakness

- Myasthenia gravis



Courtesy Dr Suzanne Busch

# Diagnostic conundrums

Is it weakness?

## Mimics of functional weakness

- Stiff person syndrome



Courtesy Dr Suzanne Busch

# Diagnostic conundrums

Is it ataxia?

Gait

Fluctuating nature  
Excessive slow  
movement



Courtesy Dr Suzanne Busch

# Diagnostic conundrums

Is it ataxia?

## Gait

- Dragging of affected leg
- Uneconomical gait
- Give way of legs with prevention of fall
- Walking on a tightrope



Courtesy Dr Suzanne Busch

# Diagnostic conundrums

## Missing the somatoform disorder diagnosis

- Patient seems normal / nice / like me
  - Nice people get functional Sx too
- Patient has no previous functional Sx
  - Patients can present with dramatic Sx with no prior Hx
- No Hx of psychiatric problems
  - Many patients are psychiatrically normal
- Patient has not been stressed
  - ~30% patients have no history of recent stress
    - Patients with disease more likely to attribute symptoms to stress
- Patient is not tired and only has one symptom
  - Should make you think twice but monosymptomatic presentations do occur

# Diagnostic conundrums

## Missing the somatoform disorder diagnosis

- Patient has an established diagnosis of “known epilepsy, known MS”
  - Always question others diagnosis (and your own)
- Patient is too old
  - Older patients with FNS often have health anxiety and other co-morbid conditions and are probably under-recognised
- Incidental abnormalities on investigation
  - Not all structural abnormalities are relevant
- Possible abnormal examination findings
  - Reflexes, plantars, urinary retention

# Irritable bowel syndrome

- Bulking agents and loperamide seem ineffective
- 5-HT<sub>4</sub>-agonist tegaserod and the 5-HT<sub>3</sub>-antagonist alosetron seem effective in selected subgroups
  - female patients with IBS dominated by constipation or diarrhoea respectively
- Antidepressants and psychotherapy moderately effective

# Fibromyalgia

- Antidepressants and CBT are effective
- Peripherally acting analgesics, NSAIDs and injections usually ineffective

# Chronic fatigue syndrome

- Graded exercise and CBT
- Limited role of antidepressants
- No evidence for immunological drugs or steroids

# Non-ulcer dyspepsia

- Limited effects of PPI, H2-receptor agonists, prokinetics and *Helicobacter pylori* eradication
- ?Antidepressants
- Most studies of psychotherapy show positive effects

# Tension headache

- CBT and tricyclic antidepressants have best effects
- ?Acupuncture
- ?Botulinum toxin

# Chronic pelvic pain

- Weak to moderate effects of hormones

# Chronic low back pain

- Treatments with active involvement (in the form of psychotherapy or exercise or other) and antidepressants
- No benefit from passive physical interventions or injections

# Conclusion

- Somatoform disorders are common
- Watch for dual pathology
- Avoid excessive investigations
- Establish a therapeutic relationship
- Employ CBT and use antidepressants when indicated
- Focus on understanding and management not cure