Confusing medical terms: disease that may or may not exist

H.K.S. COHEN, A. LUTHER and C.A. HART

From the Department of Surgery, Northampton General Hospital, Northampton NN1 5BD, UK

Address correspondence to Mr C.A. Hart, Department of Surgery, Northampton General Hospital, Northampton NN1 5BD, UK. email: c.hart@doctors.org.uk

Summary

Patients often quote diseases or illnesses that either do not exist per se or are hard to prove that they exist. Often symptoms are vague and, therefore, difficult for patients to qualify in a language clinicians can understand, interpret and act upon. Physicians often perpetuate this by giving ‘diagnoses of exclusion’, or using poor explanations, oversimplifications, conflicting diagnostic criteria or vague historical terms that have now evolved into something else. However, the history taker must be able to interpret the subtle language barrier that exists between doctor and patient. In this short review of the literature, some commonly quoted conditions are examined more closely to try and understand further the terminology used by both patients and clinicians alike.

Introduction

Pattern recognition in history taking is an important weapon in the armoury of the diagnostician, however, translating the patient’s subjective experience of symptoms into a pattern that can be objectively recognized may be difficult. The clinician sometimes fails to confirm a disorder, yet patients are frequently driven by the need for a definitive diagnosis. Often clinicians, aware of finite resources, are unable or unwilling to identify a cause for symptoms beyond the common or life threatening illness and after comprehensive investigations, finally give patients ‘diagnoses of exclusion’ in an attempt to gain closure to an episode.

There may be a failure on the part of the physician to recognize a disease, and occasionally symptoms may be factitious. Conflicting medical definitions, historical misidentification, the evolution of a named disease process over time and the use of arbitrary labels to describe conditions, all add to the difficulties faced by the clinician. These factors, combined with vague presenting symptoms may contribute to the medicalized vocabulary, or conversely over-simplified explanations taken up by the general population who often adopt poorly defined terms to describe their own symptoms or diseases.

In addition, terminology relating to how medical professionals and patients are defined is constantly evolving, which is likely to cause confusion. Patients are now being described as ‘consumers’ and medical staff as ‘providers’. This further compounds the concept of a ‘right to diagnosis’, as successfully managing illness becomes increasingly a business like transaction and may place further pressure on doctors to provide a diagnosis, even if one only of exclusion.1

The nervous breakdown

The definition of a ‘nervous breakdown’ has never been formally categorized using a diagnostic system such as International Classification of Diseases (ICD)-10 or Diagnostic and Statistical Manual of Mental Disorders (DSM)-IV. Surveys of the general public, seeking to define it, suggest that the term...
refers to a specific acute time-limited reactive disorder, involving symptoms of anxiety and depression, usually precipitated by external stressors. The American General Social Survey 1996 asked half of its participants to define a ‘mental illness’, whereas the other half were asked to describe a ‘nervous breakdown’. Responses demonstrated that the public differentiated a ‘nervous breakdown’ as being a neurotic or mood disorder, whereas the term ‘mental illness’ inferred a more serious psychosocial disorder, associated with psychosocially abnormal or violent behaviour. This survey also revealed that the prevalence of feeling ‘an impending nervous breakdown’ among US citizens was higher than at any other point as recorded by the previous 1957 or 1976 Americans View Their Mental Health Surveys. It is unclear whether the number of nervous breakdowns had increased or whether the meaning of the term had changed so that the public’s attitude towards psychological problems had become more accepting.

Low blood pressure

Patients often report feeling faint or suffering from ‘low blood pressure’, as part of their symptomatology, which may be associated with other symptoms such as chronic fatigue or dizziness. This is a distinct entity from objective hypotension. In the UK and the USA, blood pressures in the ‘low normal’ range are thought to be advantageous. In other parts of Europe, they are seen as a disease entity, often referred to as ‘constitutional hypotension’ and treated with medication and numerous physical treatments. A population study carried out in the UK in 1990 examined whether an association exists between blood pressure in the ‘low normal’ range and common symptoms, such as tiredness, dizziness, headaches and palpitations. It found a negative association between systolic blood pressure and self-reported tiredness and feeling faint, which remained after an adjustment for possible confounders. It also concluded that low blood pressures may be associated with increased morbidity, but a decreased mortality. Epidemiologists and physicians tend to focus on mortality instead of morbidity, which is perhaps why possible associations between fatigue and low blood pressure have been neglected. It tested the hypothesis that there is a prospective association between constitutional hypotension and new onset fatigue. No association was shown, indicating that hypotension is not a risk factor for idiopathic fatigue.

Pleurisy

Poorly described or factitious symptoms may arise as the result of medical terms evolving through history. The term ‘pleurisy’ has developed over time and has had multiple meanings. Giovanni Batista Morgagni performed around 700 post-mortems, and recorded in 1761 that pleurisy was the ‘discourse of pain in the breast, side and back’. The quality of this pain was said to be ‘pungent’, associated with fever, a ‘hard pulse’ and difficulty lying on the unaffected side. He linked pleurisy with peripneumony (inflammation of the lungs) but not phthisis (consumption, or cachexia due to pulmonary tuberculosis) and derived the term ‘pleuripneumony’, or inflammation of both the lungs and pleura.

Laennec, the inventor of the stethoscope, described the physical sign of inflammation of the pleura as sounding like the bleating of goats, which he called egophony. He distinguished pleurisy as being an umbrella term for a whole disease process, of which pleuritis was just a part. In 1852, John A. Swett, Physician at the New York Hospital and Member of the Pathological Society, gave a course of lectures on diseases of the chest and in describing pneumonia stated ‘It is rare to find a considerable effusion of serum, as happens in simple pleurisy’. The meaning of pleurisy had shifted from a collection of symptoms describing pleuritis to the presence of an effusion with concomitant inflammation of the lungs.

The terms of ‘pleurisy’ and ‘pleuritis’ in the modern age seem to have become synonymous. Pleuritis histologically describes an inflammation of the parietal or visceral pleura, clinically resulting in pain on respiration and often associated with dyspnoea or a cough. The pain is produced by the loss of the normal compliance of the lung and the rub of inflamed pleura, which normally glide against each other. Lung cancers including mesotheliomas, sickle cell anaemia, chemo- or radiotherapy, pulmonary emboli and some autoimmune diseases, notably rheumatoid arthritis or systemic lupus erythematosus, may all lead to pleuritis and pleuritic pain. In more modern times, pleuritis has become synonymous with tuberculous infections.

Double pneumonia

Patients will often describe a previous acute severe lung infection as having a ‘double pneumonia’. The
term may describe a secondary bacterial infection following an acute viral respiratory tract infection, rather than a concurrent bilateral infection. In fact bilateral pneumonias are so uncommon and associated with such high mortality rates, that they cannot be associated with common entity of ‘double pneumonias’. Bilateral infection has a grave prognosis whether due to chronic disease\textsuperscript{10} or in the immunocompromised. In these patients, typical organisms are opportunistic and frequently fungal. The chest radiographs in Figures 1 and 2 show evidence of pneumonias that may be described as a ‘double pneumonias’, the first indicating involvement of two lobes of the same lung and the other pneumocystis carinii typically displaying central shadowing.

There still remains some difficulty in establishing a quick diagnosis of bilateral pneumonias, even with modern digital radiography equipment. Recently, a group from Chicago demonstrated an improvement in pneumonia detection rates with a bone suppression imaging system.\textsuperscript{11} Although radiological evidence of bilateral pneumonia may be observed, chest radiographs are more sensitive in diagnosing bacterial pneumonias.\textsuperscript{12} A Belgian retrospective review of 172 patients more than 7 years diagnosed with invasive \textit{Aspergillus} spp. showed that only 5\% displayed the characteristic crescent or halo signs on plain chest radiographs. Pathognomonic signs are often only seen in very advanced cases, if at all. In this cohort, the reported hospital mortality rate was around 77\%.\textsuperscript{10} Given the grave nature of bilateral pneumonias, the difficulties diagnosing and treating them, it is unlikely that there would be such an abundance of patients who have suffered a ‘double pneumonia’.

**Low blood sugar**

Disturbances of blood sugar have been recognized since 1552 BC, when Egyptian physician Hesy-Ra recorded on papyrus the first known reference to polyuria and a wasting disease, now known as diabetes mellitus. There is, however, little in the literature regarding the phenomenon of ‘low blood sugar’ in the non-diabetic population. Frequently cited as a cause for dizziness, fatigue or depression, experiencing ‘low blood sugar’ has become commonplace. Physicians tend to use the term ‘hypoglycaemia’ to indicate low blood sugar in conjunction with neurogenic signs, or those of neuroglycopaenia.\textsuperscript{13,14} Whipple’s triad (the presence of symptoms with confirmed hypoglycaemia and resolution of such symptoms with restoration of normoglycaemia) is used to determine hypoglycaemia in non-diabetics, whereas pure hypoglycaemia \textit{per se} in a diabetic population is sufficient for diagnosis. Levels of blood glucose below 3.0 mM trigger the release of adrenaline and glucagon to mobilize sugar stores, which may also cause nausea and vomiting, paraesthesia, pallor, tachycardia, anxiety and depression. Levels below 2.2 mM are likely to impair judgement and cause headaches, whilst even lower levels can bring more severe symptoms and signs such as dysphoria, irritability, personality change, confusion, delirium, automatism, ataxia, seizures or coma.\textsuperscript{15} Unsurprisingly, most research into low blood sugar

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**Figure 1.** Chest radiograph demonstrating radiographic evidence of a lobar pneumonia affecting bilateral upper lobes.

**Figure 2.** Chest radiograph demonstrating radiographic evidence of a pneumocystis carinii pneumonia affecting both lungs.
or hypoglycaemia has been directed towards diabetics, who are the group most directly affected, as their management is limited by the threat of hypoglycaemia.13

The commonest cause of hypoglycaemic events are iatrogenic and most frequently seen in type 1 diabetes,16 although severe hypoglycaemia may occur spontaneously or in patients with non-classified disease.17 Symptoms when recognized, are neurogenic in nature rather than adrenomedullary in origin.14 A recent study attempted to show the accuracy of diabetic patients’ (n=104) estimations of their own blood glucose levels. The onset of hypoglycaemia was to be recorded, as well as any psychological or physical disturbances. There was no positive association in these estimations when compared with concomitant blood sugar levels as measured by a blood glucose monitor.18 This study concurred with previous ones and the bulk of evidence so far, which despite small numbers and selected populations, shows that neither diet controlled, tablet nor insulin-dependent diabetics can reliably predict their own blood sugar levels.18–21 The phenomenon of hypoglycaemia associated autonomic failure causing hypoglycaemia unawareness in this group, however, must be taken into account.17,22,23

Rheumatism

Just as pleurisy evolved from a historical umbrella term to describe a variety of pulmonary symptoms, similarly the contemporary definition of rheumatism proposed by Antoine Furetiere in his Dictionnaire Universel 1690, described a broad array of musculoskeletal symptoms. Rheumatism was defined as ‘a great fluxion which races to various parts of the body, and goes from one to another’.24 Acute rheumatism has more recently been used to describe rheumatic fever. The term is most often used by patients to describe pain or dysfunction of the joints or connective tissue, but no longer features as an entity in modern medical texts or teaching. More modern definitions now attribute rheumatism as ‘a constellation of nonspecific complaints; pain, stiffness and limitation of movement vaguely attributable to derangements of joints and supporting connective tissue’. The lack of a precise definition of rheumatism has not prevented its notoriety. A national paper recently published an article proclaiming that ‘Rheumatism is the biggest single cause of disability in Britain and it affects eight million sufferers’.25 The increase in ‘rheumatism’ in the popular press has been attributed to our increasingly sedentary lifestyle, too much exercise, or even wearing high-heeled shoes. In this context, the term includes any musculoskeletal complaint from repetitive strain injury to rheumatoid arthritis and systemic lupus erythematosus, although the latter are probably better described as ‘rheumatic diseases’. Medical organizations, such as The European League against Rheumatism, which still use such an outdated term in their title perpetuate such ambiguity, as does the highest impact factor rheumatology journal Arthritis and Rheumatism.

Summary

There is often a discrepancy between the language used by patients and that used by clinicians and this is a rift we must be careful to negotiate. Clinicians use terms of convenience to explain disease processes adequately, or to try and achieve a satisfactory conclusion to a disease episode. The current culture of viewing patients as ‘consumers’ can also increase the demand for a diagnosis and may lead to further use of poorly defined terms.1 In fact, physicians can be poor at explaining themselves to their patients and to their peers. Scientists can use ‘confusing and sometimes meaningless medical terms’.26 Clinicians assume patients fully understand the dialogue between them but this may not be the case.27 Malapropisms abound, recently a patient referred to the general surgical clinic with dysphagia, explained that her sister had presented with the same and had her ‘sarcophagus’ removed. A physician should be proficient to easily recognize, define and interpret common vernacular terms, whilst being cautious to not add confusion with poorly defined terms of their own.

Conflict of interest: None declared.

References