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PSYCHOSOMATIC SYNDROMES: REPORT OF A SYMPOSIUM HELD IN THE COLLEGE ON 5 APRIL 1995★

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> Medical Rationality plunges into the marvellous density of perception, offering the grain of things as the first face of truth, with their colours, their spots, their hardiness, their adherence. The breadth of the experiment seems to be identified with the domain of the careful gaze, and of an empirical vigilance receptive only to the evidence of the visible contents.
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> *The Birth of the Clinic, Michel Foucault*

Psychosomatic disease is frequently a source of multiple referrals, leading to multiple investigations and often multiple operations. This imposes a considerable economic burden on society. The symposium on psychosomatic disease, held in the Royal College of Physicians of Edinburgh, brought together doctors from many different fields of medicine to hear presentations that dealt with the aetiology and management of psychosomatic disease. It was evident from the presentations that structured attempts are being made to investigate ways in which people with psychosomatic disease can be managed, and that clearer therapeutic strategies were emerging as a result of this research. It was also evident that many of those involved in these studies were having to rethink their clinical practice and look beyond the biological constructs within which they have tended to operate.

It is estimated that between 3–25% of consultations in General Practice concern psychosomatic disease. In a UK primary care study 20% of new referrals to general practice fulfilled research criteria for psychosomatic disease, as did 30% of new patient referrals in a UK Hospital Study. A survey of general practitioners in Edinburgh found that the average number of drugs used to treat people with psychosomatic disease was five, significantly higher than the number required by the unaffected population. In the USA it is estimated that a person with psychosomatic disease will incur nine-times the health care costs of age and sex matched controls.

Psychosomatic disease also incurs a considerable social debt. Patients can spend many days off work or even feel unable to work at all. This has a direct impact on families causing considerable economic strain. These patients can also be very demanding of their families requiring substantial emotional support.

Non-cardiac chest pain

Approximately 50% of new referrals to a cardiac clinic do not have heart disease, and in the UK there are 12,000 new cases per year of people with recurrent chest pain and yet no cardiac abnormalities. A 10-year follow-up study of patients with recurrent chest pain and normal coronary arteries (NCA) found no difference in mortality between this group and the general population. The study also revealed that further investigation of these patients was common and 71% were still on

★A list of speakers and the titles of their papers presented at this symposium is recorded in *Proceedings* Vol. 25, p 236.

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anti-anginal medication. Twenty-nine percent were out of work as a direct result of their disabling chest pain, and 44% still believed they had coronary artery disease (CAD). During a stuctured interview by investigators blind to angiogram results, 61% of the study cohort were found to have evidence for psychiatric disease (mostly chronic anxiety or intermittent depression).

It has been estimated that 60% of people referred with diagnosis of non-cardiac chest pain show oesophageal abnormalities on investigation. This does not necessarily imply a causative aetiology as disturbances of oesophageal function have also been found in patients with CAD. Oesophageal monitoring reveals a poor association between symptoms and abnormalities in patients with recurrent chest pain and NCA.

There is a degree of medical culpability in patients' perceptions. In a recent study of patients with non-cardiac chest pain and NCA, those patients with abnormalities on oesophageal pH monitoring were informed of this and appropriately treated. On follow-up 32% of their respective general practitioners still felt that their patients pain was originating in a disorder of the heart. For some people months (or years) of anxiety may be re-enforced by medical attention directed towards the heart.

The results of most trials of therapeutic intervention in non-cardiac chest pain have been disappointing. A prospective study examining patient education (directed at re-focusing beliefs about the nature and origin of the chest pain), relaxation techniques, and the use of breathing control where indicated to reduce the effects of hyperventilation, is currently being conducted in Edinburgh. This study is based on the hypothesis that non-cardiac chest pain may arise as a result of an 'altered visceral sensitivity' (i.e. a trigger of some form leads to the subjective experience of chest pain, which the subject 'misinterprets' leading to anxiety. This in turn leads to symptom monitoring, autonomic arousal and skeletal muscle tension. This encourages deconditioning activity, re-assurance seeking and the sick role). Preliminary results show a reduction in the number of anginal episodes in the intervention group from 5·5 to 1·5 episodes per week, a decreased use of nitrates, a decrease in anxiety rating scores, an increase in the number of pain free days, and an increase in exercise capabilities.

Globus sensation

It has been estimated that 45% of the general population has experienced globus sensation. It is the source of 3–4% of referrals to a specialist ENT clinic. Like many psychosomatic syndromes there is a female preponderance (female to male ratio 3:1). The aetiology of this condition is not clear. In a study of patients in the Edinburgh Globus Clinic from 1985–1987 (n=207) approximately 11% of the cohort were found to have radiological evidence of gastro-oesophageal reflux (GOR). Distal biopsies obtained from these patients were normal in 77% of cases, and no difference was found in distal oesophageal acid exposure times with ambulant pH monitoring in the symptomatic patients versus chest pain controls. It has been suggested that globus patients show higher amplitude oesophageal contractions with shorter transit times; alternatively this may represent patients giving a big 'swallow' to overcome a perceived 'obstruction'.

Globus patients exhibit more psychiatric disease, are more introverted, have lower mood states and increased anxiety scores, and show psychosomatic morbidity when compared with female controls also attending ENT clinics. A study

of women (n=1,457) attending a shopping centre (on the basis that the increased psychiatric morbidity may simply be a reflection of self-selection in hospital attendees) found 6% had experienced a persistent feeling of something in their throat during the last three months. These women had increased neuroticism, introversion, somatic concerns, phobic obsession and depression in comparison with the rest of the study cohort. Importantly, they revealed the same psychological characteristics as the hospital attendees.

The treatment of globus is difficult. Amitriptyline has not proven helpful because of its tendency to cause a dry mouth, and tricyclic drugs may lead to an initial increase in symptoms akin to those of anxiety (the Tricyclic Syndrome). Anxiety management and cognitive approaches to management are being tried. The prognosis for patients with globus is not good. Only 5% are 'cured', whereas 61% remain 'aware of their throat' at least once per week after more than two years.

Psychological factors and abdominal symptoms

It is estimated that 15–30% of the general population suffer from Irritable Bowel Syndrome (IBS), and of these 50% are thought to have underlying psychological disease. From 25–50% of referrals to a gastro-enterology clinic are for IBS. The female to male ratio ranges from 1–2·5:1. The diagnostic criteria for IBS are 3 months of abdominal pain or discomfort, relieved with defecation, plus two or more of the following; altered stool frequency, altered stool form, alterations in stool passage, the passage of mucous, bloating or distention. In IBS pathophysiological and mechanical abnormalities have been noted in the small and large intestine, but no unified abnormality has emerged. There is some evidence of altered visceral sensitivity with an increase in the rectal sensation to a uniform stimulus in IBS compared with control subjects, although not all studies have confirmed this.

In a local community survey 16·6% of the local population were found to have IBS. Sixty-four per cent of those who consulted a doctor about their symptoms showed evidence or anxiety and depression, compared with 22% of those who did not, and 23% or normal controls. Consultors had more frequent and more severe symptoms which had been present for a longer duration and caused more disruption in their lives. Consultors scored highly on measures of bodily concern.

There is an association between IBS and upper GI somatic complaints, urinary frequency and miscellaneous symptoms such as dyspareunia, as well as an association with other psychosomatic diseases. A study of the Chronic Fatigue Syndrome found that 50% had consulted their general practitioner with bowel symptoms and could have been diagnosed as suffering from IBS.

The diagnosis of IBS is established from the patient's history, and further investigation is not usually required (unless specifically indicated e.g. age >45 years consider the possibility of colonic cancer). Two modes of therapeutic intervention can be tried (either alone or in combination). The first focuses on organic disease and includes an investigation of possible dietary triggers, use of anti-diarrhoeals or fibre bulking agents, and anti-spasmodics. The second involves cognitive therapies beginning with an explanation of how the brain can effect symptom perception, and perhaps supported by psycho- or hypnotherapy. Some use has been made of anti-depressant therapy.

Atypical facial pain and headache

Idiopathic facial pain has at some time affected 25–50% of the population. This group of conditions includes tempero-mandibular dysfunction, atypical facial pain and oral dysaesthesia. There appears to be a female predominance, and females are four times more likely to attend a hospital in connection with their facial pain than males. It has been estimated that about half of those presenting to the hospital with facial pain have evidence of psychsomatic disease, and most have a history of previous adverse life events (though it is not clear whether this is any different from the hospital population in general). A cerebral basis for this somatisation has been postulated following an interesting study using Positron Emission Tomography where an increase in tracer uptake was noted in the hypothalamus in those patients with atypical facial pain compared with normal controls.

If no organic cause for atypical facial pain can be identified from a history of previous trauma or joint pathology or from the physical examination, a gentle exploration for possible underlying psychosomatic disease should be made. Therapy with analgesics is not usually helpful, and the data on antidepressant therapy is inconsistent, although there is currently some interest in the use of 5-HT reuptake inhibitors. Treatment strategies may involve psychotherapy and counselling and an explanation of the psycho-physical relationship.

Fibromyalgia and soft tissue pain

In fibromyalgia there is widespread musculoskeletal pain, and discrete tender points are evident on clinical examination. The pain should have been present for at least 3 months, occur along the axial skeleton and in at least two opposite quadrants. Fibromyalgia is the second commonest diagnosis in Rheumatology clinics in North America. A National Random Population sample from England and Wales estimated that as much as one third of women (the figure was a little lower in men) had experienced this condition. In those people who experience chronic symptoms there is often evidence of increased anxiety, depression and sleep disturbance. There are associations with diseases such as IBS and Chronic Fatigue. In a study of the risk factors for the development of low back pain (n=2,000) a previous history of back pain and the score on the General Health Questionnaire were found to be the only predictors for developing a new episode in the following year.

The aetiology of this condition is unclear. The relationship with psychological factors suggests an abnormal 'sensitivity' to pain very much like that postulated in other psychosomatic disease. Analgesic therapy is of questionable benefit. Cognitive therapies are being assessed.

Syndromes of chronic fatigue

The cardinal feature of the Chronic Fatigue Syndrome is the experience of profound fatigue. It usually occurs in people of previously good health, and effects a heterogenous group of both professional and non-professional people. There may be a history of an antecedent infective-type illness. There are often psychiatric symptoms such as depression, anxiety, emotional lability, tearfulness, poor concentration and sleep disturbance. The condition usually pursues a variable course. The differential diagnosis includes well defined diseases such as hypothyroidism, occult malignancy, and psychiatric disease. One should also

consider Fibromyalgia Syndrome, Irritable Bowel Syndrome, and depressive or anxiety states.

There has been an increase in the reporting of Chronic Fatigue Syndrome over the last few years. In the USA chronic fatigue has an estimated prevalence of 20–25% in the general population, but a firm diagnosis is made in <1%. The aetiology of this condition is unknown. Coxsackie B virus, retroviruses, unidentified new viruses, abnormal interleukin levels, pesticide poisoning and hypothalamic dysfunction have all been reported as possible causes but there is little hard evidence to substantiate any of these claims. Whatever the aetiology, the outcome is uncertain, only a small minority becoming totally symptom free, but fifty to sixty per cent show some improvement over a period of years. According to one survey, 'most cases seen do not improve, give up their work, and become permanent invalids'.

Chronic Fatigue Syndrome belongs to that group of ill-defined conditions with no apparent structural pathology, and often an associated affective disorder. It is prudent to be modest in diagnosis, but important to give a label (though not a grouped label, and more specific diagnoses such as IBS, Globus, Fibromyalgia, may be more appropriate depending on the principal symptoms). There is no proven therapy for Chronic Fatigue Syndrome, though cognitive and behavioural therapy may be indicated in some circumstances. Anti-depressant medication may occasionally be appropriate.

Conceptual issues in psychosomatic disease

The aetiologies of the different psychosomatic diseases are unknown. Our understanding of the interactions between psyche and soma is very limited. In explaining the particular diathesis of some people to somatise disease psychologists have employed many different constructs. Whereas some have investigated whether patients with these disorders have particular personality attributes (e.g. neuroticism, somatopsychic distress, emotion-orientated coping, hardiness, alexithymia), others have focused on lower-level processes more related to bodily symptoms (e.g. somatic amplification, physiological reactivity, somatic attention, attributional style). Personality constructs may prove too vague to explain somatisation, and mid-level processes too specific. Several constructs within each category show considerable overlap, and many have limited validity at present.

Despite the proliferation of psychological constructs which attempt to explain psychosomatic disease, no single unifying hypothesis has emerged. There is no satisfactory explanation of the inter-correlations between the psychosomatic diseases, such as IBS and Chronic Fatigue Syndrome. Also unanswered is the question of why, if psychosomatic disease does have a similar source in the personality of the patient, the focus is not more unified to one particular region of the body? Future research will have to examine these issues in some detail. Until this information is available the tendency to pursue an organic sequence when making a diagnosis will remain—'ruling out the highly rare rather than ruling in the highly likely'. The unfortunate consequence is a consultation from which neither doctor, nor patient, leave satisfied.

He chases his tail
Like a puppy-fool
And wonders it tastes stale
The puppy-fool.
Stevie Smith

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THE NEW GENETICS: A CHALLENGE TO CLINICAL VALUES?★

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There can be few developments in medicine and science which have the capacity so fundamentally to alter our present and future lives as those emerging from the new genetics. The vast potential of the information derived from the Human Genome Project and the advances in genetic diagnosis cannot be underestimated as forces which will shape present and future societies. They will profoundly affect each of us individually and collectively. Much of the debate concerning genetic information and the uses to which it may be put has been couched in terms of the sophisticated science which it entails. Concentration on this, however, tends to ignore the impact that our new capacities will have on the actual providers of health care and on the patients whom they see. It is this imbalance which I hope to address here.

In 1992, the World Medical Association's declaration on the Human Genome Project pointed to the significance of enquiries into the genetic basis of disease and other conditions. As it said 'In the second half of the 20th century a conceptual revolution occurred when one started thinking of diseases in terms of biochemistry. A new revolution is happening now which locates in the gene the instructions for all the biochemical processes in the body's cells'.[1] This challenge has been taken up by the scientists engaged in the world-wide venture which is the Human Genome Project, whose expressed aim is to acquire '... complete knowledge of the organization, structure, and function of the human genome—the master blueprint of each of us...'.[2]

The so-called 'Holy Grail' of modern medicine is a multi-million pound venture into the unknown. Yet some things are immediately clear about it, not least that the dilemmas which it will pose are significant for individuals and for those involved in the provision of their health care. In countries such as the UK, these health care providers will be both general practitioners who are the most frequently in contact with the affected groups and individuals and whose intervention triggers reference into the high-tech world of hospital medicine, and those working in hospitals and clinics, charged with the responsibility of diagnosing, curing, counselling and caring for affected individuals. In other words, all physicians will share the burden of any ethical and legal consequences which flow from genetic knowledge. As an aside, this may well change the face of medicine by imposing an additional unifying set of problems which serves to break down barriers between specialisms.

Taking a critical, but not cynical, look at the ways in which we can, will or should deal with genetic information is of utmost importance. I intend to seek to do this by posing one central question—that is whether or not the new genetics is likely to present us with new dilemmas or whether it will simply present old problems in a more acute manner. This I try to do by looking at one or two of

★Based upon a contribution to a College symposium in Inverness on *The Ethics of Research on the Human Genome.*

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