Examination Techniques and Reporting on Musculoskeletal Conditions

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Throughout my time in orthopaedics I have been heavily involved in medical reporting, particularly for personal injury claims, both for plaintiffs and defendants. As an extension of this work I became interested in the use of functional testing as an additional factor in patient assessment. I have now interviewed, examined and reported on many hundreds of patients where I have used functional testing results as a factor in patient assessment.

Establishing a Diagnosis

In many cases in orthopaedic practice, just as in medicine generally, the determination of a diagnosis is a relatively straight forward procedure. The patient has significant symptoms and specific physical signs leading to a clear diagnosis that can be confirmed by laboratory or other testing, by surgery or by an appropriate response to other forms of treatment. In a proportion of cases it is more difficult to establish a diagnosis because the symptoms are indefinite, the physical signs are few and inconclusive and the appropriate investigations are unhelpful or ambivalent. Many cases such as this are seen in orthopaedic practice and it is not unknown for a patient to have a number of consultations followed by multiple investigations without a definite diagnosis and basis for his symptoms being established. Such a patient may then undergo surgical treatment following which symptoms persist and the diagnosis is still in doubt.

To some extent the situation described above has been modified as a result of the extreme stresses and overloading of the health service. Waiting lists for out-patient consultations are lengthy and it may be many months before a patient is seen. As a result of these pressures the follow-up consultations are avoided whenever possible and the opportunity for a consultant to investigate, reassess and review a patient in order to make a diagnosis is restricted. In these circumstances Orthopaedic Surgeons will frequently see a patient on only one or two occasions, chiefly to establish whether the individual is a candidate for surgical treatment or not, rather than fully evaluating the situation and making an accurate diagnosis. If a patient is regarded as not requiring or being suitable for surgery, he or she will be referred back to their general practitioner. The General Practitioner for his part, in the face of lengthy waiting lists, is less likely to refer his problem patients to hospital if he does not feel that the case is likely to require surgery or has unusual signs or symptoms necessitating Consultant's advice. The situation therefore now exists where a considerable number of patients, particularly with non specific back pain and neck pain are managed largely by their General Practitioners, on the basis that their symptoms are related to degenerative change and if

these symptoms do not respond to a combination of rest, medication and physical treatment such as physiotherapy or osteopathy there is a risk of chronic symptoms leading to long term work incapacity. In a number of the cases the pathology from which the disability results is relatively minor but assumes major importance because it is not diagnosed or treated and the patient has not been helped to gain any insight into his problems.

Functional Capacity Evaluations (FCE)

Functional Capacity Evaluations are undertaken at the request of employers, insurance companies or other organisations responsible for the healthcare of employees and for lump sum or other payments whilst an individual is unfit for employment. The request for an evaluation will usually be followed by the disclosure of a medical file and the FCE will normally be carried out by a Senior Physiotherapist usually with a lengthy experience gained in NHS hospital and private medical work. In addition to their general expertise, the physiotherapists have considerably skill and experience in managing patients in this environment.

The comprehensive nature of the evaluation usually leads to the assessment taking up to three hours. Prior to the assessment the physiotherapist will have studied any documentation available so as to be aware of the patient's symptoms, findings, investigations and treatment up to the time of the appointment. A full history will then be taken, followed by a physical examination relevant to the patient's symptoms. The patient then completes a pro-forma which is valuable in establishing the nature of symptoms, any tendency to overstate symptoms and an indication to the patient's level of disability. Functional testing is then carried out with specialised apparatus that is linked to a computer to allow accurate calibration. Physical function is assessed by testing ranges of movement at various joints and the power of movement of muscle groups together with the ability to carry out lifting, pushing or other activities that might be encountered in every day life or work. The accuracy of measurement of these activities is important as particular restrictions of movement or localised areas of weakness may be helpful to the determination of a diagnosis. Each test is repeated on a number of occasions to gain precise data on function and this also helps to establish if there are any significant inconsistencies in performance. At the completion of testing the physiotherapist will then prepare a report based on the patient's symptoms, any previous relevant findings, clinical findings on the day and the results from functional testing. If requested the patient may then be examined and interviewed by a Consultant who has similar access to the patient's medical file and a second report will be submitted. The FCE is thus an extensive assessment undertaken by medical professionals who see the patient with no preconceptions, evaluating the symptoms and physical signs and identifying whether the results from functional testing accurately reflect the signs and symptoms as part of a pathological process. Testing is valuable in confirming a diagnosis and in suggesting new diagnoses.

Some companies have found it useful to carry out an FCE in the first few months of a patient's disablement so that the correct treatment and rehabilitation can be instituted at an early stage before the patient becomes disillusioned and depressed by their

symptoms. Functional testing has also proved valuable in establishing that in some patients, symptoms do not have a physical basis, so that to continue with physical treatment is unhelpful, time wasting and expensive. The advantages are clear to see, particularly in objectively determining a patient's ability to return to the workplace.