Bath Ankylosing Spondylitis Functional Index

Str.—As discussed elsewhere [1], we have recently developed a new method for assessing functional status in patients with ankylosing spondylitis (AS): the Bath Ankylosing Spondylitis Functional Index (BASFI). This self-assessment instrument was designed by a multidisciplinary team of health professionals in conjunction with patients. In the process of its validation, it was compared to the Dougados functional index (FI) [2]. A recent article in the Journal [3] compared a new Dutch FI with that of Dougados. We suggest that the BASFI has advantages over both.

A number of the limitations of the Dougados FI also apply to the Dutch FI. For example, the scoring system results from only three possible answers to each of the questions in both indices. This renders the instruments relatively insensitive to change and also limits use of the whole scale. There was no input from physiotherapists or patients during the design of the Dougados index which resulted in certain questions being worded ambiguously. Initially, we felt that the Dougados instrument should be simplified and redundant questions discarded. The BASFI consists of ten particularly relevant functions, some from the Dougados FI. The ten questions are specific in their instruction, clinically relevant, encompass the appropriate anatomy and reflect the overall level of function of the patient. The use of 10 cm visual analogue scales (VAS) improves sensitivity and increases the capacity of the index to make use of the whole 0–10 scale: specifically [1], in comparison to the Dougados FI, BASFI was more sensitive (i.e., there was a 20% improvement to the function of 47 consecutive inpatients during a 3-week intensive physiotherapy programme, according to BASFI, but only a 10% improvement with the Dougados scale). Moreover, the scores were distributed across a higher proportion of the scale (95 vs. 65%, respectively).

The Dutch FI is actually an extended version of the Dougados FI. We found [1] internal redundancy between some components of the Dougados FI which makes it likely that there is yet further internal redundancy within the Dutch FI. In addition, the Dutch index takes an average of 5 min for the patients to complete, compared to an average of 100 s for BASFI. The Dutch FI ranges from 0–4. However, only 61% of the range was utilized by their patients’ scores (i.e. 0–2.45). By contrast, no less than 95% of the range was accounted for by BASFI, but only a 10% improvement with the Dougados scale).

The Dutch group conclude that ‘‘the Dutch FI is a potentially useful instrument, which is valid, reliable and sensitive to the effects of NSAID treatment, is easy to administer and requires little time for completion’’. We suggest that the BASFI, whilst also being valid and reliable, is more sensitive to change, easier to administer and requires substantially less time for completion than the Dutch FI. It could quite simply be translated into Dutch, or indeed any other language, as has been done with Urdu, Spanish and Portuguese (unpublished data).

Perhaps the most significant advantage of BASFI is that it satisfies the needs of health professionals and, in addition, has particular clinical relevance since patients with AS were involved in its design and development. Taking into consideration the recent acceptance that the patient’s perception of disease is particularly relevant in AS [4], the BASFI and the BASDAI (Bath Ankylosing Spondylitis Disease Activity Index, a newly
developed self-administered instrument to measure disease activity, [5] together, provide the best method of obtaining accurate data regarding disease progression in patients with AS.

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REPLY

Sir—We read with interest the letter by Calin and colleagues regarding our recently published paper. We would like to offer the following reply.

We agree with Calin et al. that the functional index (FI) of Dougados has some limitations, this was mentioned in our introduction and was one of the reasons for developing a Dutch version of the FI [1-3]. For the development of the Dutch FI we modified the Dougados FI extensively. Although all items of the Dougados FI were used, additional items have been formulated out of interviews with patients with ankylosing spondylitis (AS), physical therapists, occupational therapists, nurses and psychologists—all professionals familiar with the problems specific to AS. This resulted in 15 additional items, covering the whole field of problems of AS in daily life. At the end three items were excluded resulting in an increase in Cronbach’s α to 0.94 indicating a reduction of the internal redundancy [4].

We have shown a significant change ($P < 0.02$) with the Dutch FI in a 48-week clinical non-steroidal study of 55 patients. As a comparison between the Dutch FI and the Bath Ankylosing Spondylitis Functional Index (BASFI) has not been performed we cannot comment on the difference in sensitivity to change between these two instruments.

In our study 61% of the range of the FI was utilized compared to 95% in the study of the BASFI [5]. This difference can easily be explained by the difference in disease duration (10 yr in our study vs 24.7 yr in the BASFI study) as functional status is correlated with disease duration.

Both the Dutch version of the FI and the BASFI are self-administered and thus simpler to assess than the Dougados FI, which is an investigator-assessed questionnaire.

It would be a good idea to compare and evaluate the two questionnaires in a clinical study. However, before doing so the BASFI should not only be simply translated into Dutch as suggested by Calin et al. but also properly validated as the properties of the scale might change by using the instrument in another population.

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A New Case of Polyarthritis as a Presenting Sign of Non-Hodgkin’s Lymphoma

Sir—The interesting article by McDonagh et al. [1] ‘Non-Hodgkin’s lymphoma presenting as polyarthritis’ presented three cases of polyarthritis as an initial sign of non-Hodgkin’s lymphoma (NHL). In their review of the literature, they found that including these three cases, only 10 cases of NHL presented as polyarthritis have been reported. Three of these 10 cases were cutaneous lymphomas with a fourth one arising in an angioimmunoblastic lymphadenopathy (AIL). We are submitting another case of a patient consulting because of polyarthritis and fever, and finally diagnosed with NHL.

A 71-yr-old Caucasian female was admitted to our hospital with a 15 day history of fever, pruriginous rash, pain and swelling in several joints, and malaise. Her condition did not improve after treatment with penicillin and clavulanate. Physical examination revealed a painless, mobile, rubbery lymph node in the right cervical region, a symmetrical polyarthritis and fever, and finally diagnosed with NHL.

Her condition did not improve after treatment with penicillin and clavulanate. Physical examination revealed a painless, mobile, rubbery lymph node in the right cervical region, a symmetrical polyarthritis and fever, and finally diagnosed with NHL. Laboratory data included normochromic normocytic anaemia with a haemoglobin of 9.4 g/dl, WBC 3.7 x $10^9$/l, and normal platelet count. Erythrocyte