

In 1997, Congressman James Traficant submitted a Bill to the U. S. Congress ([\[1\]](#)) calling for a ban on myelogram dyes, and research into myelogram-related arachnoiditis and potential treatments.

Traficant pointed out:

"A large number of medical professionals do not know how to diagnose myelogram-related Arachnoiditis...lack of information prevents the physician from recognizing the disease."

It is vital for the assessing physician to take into account that adhesive arachnoiditis does not present with a discrete clinical picture and that there may be symptoms that at first glance appear unrelated to any proven pathology.

In addition, the few tests available to assess the level of pathology are ineffective at representing the true impact of the condition upon a patient's life.

Sadly, a significant proportion of patients have had difficult previous experiences with the medical profession.

Many have been labelled as having psychosomatic problems, although the Mensana study in 1993([\[2\]](#)) found that most chronic pain patients do have underlying organic pathology.

The Mensana authors stated: "Unfortunately, the psychiatric abnormalities that are the normal response to chronic pains tend to bias many physicians, resulting in less than extensive evaluations".

They go on to recommend a multidisciplinary approach, which they believe leads to improved diagnostic accuracy.

Although the study does not refer specifically to arachnoiditis, this is a neurogenic pain syndrome that causes chronic pain, as do those conditions studied by Mensana.

Physician bias against patients involved in litigation, as well as female patients with chronic pain conditions ([\[3\]](#)) may still be encountered.

Previous consultations with overtly sceptical healthcare professionals may lead patients to be highly sensitive to the presence of such a bias.

The iatrogenic nature of the condition is likely to occasion feelings of anger and resentment, which can interfere with the therapeutic relationship. Over-assertive or highly anxious patients may need some reassurance that they are (finally) being taken seriously.

It may therefore be unproductive for the doctor to assess the patient's personality and coping abilities within the first interview: this can be postponed until a good rapport has been established.

Historical information may be convoluted and patients are often poorly able to communicate the sequence of events and the current, usually diverse symptoms.

Examination may or may not reveal significant neurological deficit. However, the possibility of pain of central origin should be borne in mind even if there is no obvious clinically observable abnormality.

The presence of central sensitisation will confer poorly localised pain that does not conform to dermatomal distribution. It is likely to be dysaesthetic pain that is difficult for the patient to describe.

If the patient complains that it feels as if their legs are going to collapse, this may suggest an element of Central Pain with muscle spindle pain; this may be demonstrable by prolonged latency on somatosensory evoked potentials (SSEP), signifying posterior column damage.

If SSEP is unavailable, examination can often detect subtle losses in vibratory sense with very exacting comparisons of tuning fork response, applying the tuning fork to a bone located under the area of greatest skin dysaesthesia. The examiner should allow the patient to indicate when vibration disappears, and then move the fork to a less dysaesthetic area for comparison.

Pathognomonic features of neuropathic pain are:

- pain poorly localised
- burning in nature
- may be felt in numb areas
- worse at night
- may include allodynia

Signs may include areas of vasoconstriction (perceptibly colder skin) which represent vasomotor manifestations of neuropathic pain, myofascial trigger points may also be identified, particularly in the paravertebral region; the pilomotor reflex may well be hyperactive in affected areas causing 'goosebumps', particularly if a tender motor point is stimulated, and there may also be trophoedema (cellulite type or 'orange peel' appearance) or dermatomal hair loss may be apparent.

The extent of nerve root involvement may be determined by use of the 'matchstick' test, in which the blank end of a matchstick is used to make firm indentations in the skin of the affected area which persist longer than those made in healthy, unaffected areas. ([\[4\]](#))

The conventional measurement of muscle strength can be insufficiently sensitive to detect significant weakness and fatigability. Perry has published two papers ([\[5\]](#) ; [\[6\]](#)) about the limitations of manual testing for weakness and also discussing compensatory overuse of muscle groups in post polio syndrome, which shares some of the features of arachnoiditis.

Perry states that

"muscles with grade 5, 4 or even 3+ strength allow a person to move normally; the greater intensity of effort is unrecognised,"

and that studies show that

"the mean strength of grade 4 muscles was approximately 40% of normal."

This is also the case for arachnoiditis patients. There may occasionally be denervation hypertrophy of muscles instead of atrophy.

Now that agencies in the United States have urged doctors to consider pain as the 'Fifth Vital Sign' (alongside pulse, blood pressure, temperature etc.) the clinician clearly has a duty to fully assess a patient's pain level.

This may be accomplished simply by using pain scales, or using the more complex pain assessment questionnaires.

The NEUROPATHIC PAIN QUESTIONNAIRE from Krause and Backonja at the University of Wisconsin may be a helpful tool. This has discriminant function scores, which predict neuropathic and non-neuropathic pain. ([\[7\]](#))

Clearly, it is vital to exclude treatable causes of the presenting symptoms.

Having done this, the onus is on the clinician to maintain an active programme of medical care and a supportive doctor-patient relationship, to ensure that the unfortunate sufferers of arachnoiditis do not feel they have

"just been left to get on with it."

[1] Congressional Record : February 12, 1997 HR 738 : from the Congressional Record Online via GPO Access (wais.access.gpo.gov)

[2] Hendler NH, Bergson C, Morrison C *Psychosomatics* 1993 Dec; 34 (6): 49-501 Overlooked Physical Diagnoses in Chronic Pain Patients Involved in Litigation, Part 2.

[3] Hendler N, Mollett A, Talo S et al. *Journal of Occupational Medicine* 1988; 30: 98-102 A comparison between the MMPI "Mensana Clinic back Pain Test" for validating the complaint of chronic pain.

[4] Gunn CC Chronic Myofascial Pain; The Myofascial Information Network, <http://www.yelmte.com/~jrleo/physical.html>

[5] Perry, Barnes, Gronley *Clin.Orthopaedics and Related Research* 1988 Aug; 233:145-162 The Postpolio Syndrome-An Overuse Phenomenon

[6] Perry, James, Fontaine, Mulroy, Downey *Journal of Bone and Joint Surgery* 1995 Aug;77-A(8):1148-1153 Findings in Post-Poliomyelitis Syndrome

[7] Krause SJ, Backonja MM *Clin J Pain* 2003 Sep-Oct; 19 (5): 306-14 Development of a neuropathic pain questionnaire.