

One of the most vital functions of our brain is to select out the important information it receives for attention, leaving the reams of 'irrelevant' information to one side to pass unnoticed by us.

The brain constantly receives countless messages of incoming information which, if we unable to prioritise, would incapacitate us totally.

We need, in other words, to be able to sort the 'wheat from the chaff'. We only pay conscious attention to a tiny fraction of the sensory input the brain receives.

Pain is an alerting signal, and a powerful one at that. This is really its primary function in an acute situation: to arouse us to action of some sort, usually of an avoiding type, to remove ourselves from the source of danger.

Our brains are designed to treat this type of information as priority, over-riding signals of lesser importance, such as what we intend to have for dinner that day, or indeed, what we went to the fridge to find.

This is why we sometimes struggle with everyday tasks like that. Pain has a tendency to 'blot out' information of a mundane nature, largely because the brain ranks it as of prime importance.

But...as we know, chronic pain has no real 'use' as such, in terms of survival, so in effect our brains are being tricked.

We can see that in order to counter the driving force of pain, we need an equally (or more) powerful force, mediated through our conscious brain, because although our pain is 'felt' in the affected body part, it is always 'perceived' in the brain.

This is the basis of therapies such as imagery, which aims to draw the brain's attention away from pain towards more pleasant information.

Of course, severe pain will still tend to over-ride most other signals.

People often describe a generalised inability to think clearly, a sort of mental 'fog', which makes everyday life more difficult than usual. Alongside this, they may feel that they are being uncharacteristically disorganised, which can be both frustrating and worrying, not to say embarrassing at times.

It is not at all uncommon for events such as family anniversaries or appointments to be forgotten. On a daily basis, inconsistency with medication can creep in unnoticed, especially if it is taken 'as required'; this is one of the reasons why timed dosing can be helpful (and use of special medication dispensers to ensure no double dosing or forgotten doses).

Frequently, this 'mental fog' results in a reduced ability to make decisions; sometimes this comes about because of 'poor' (inadvisable) decisions made in the past, which have caused a loss of confidence.

Mental blocks and difficulty in finding appropriate words seem to be quite common problems in people with chronic pain.

This may be because pain is a considerable distracter and it impinges so much upon conscious thought processes that memory recall is affected. Short-term memory for new information, particularly (for some reason, as yet unclear) heard information rather than the written word, is often affected.

This can in turn cause difficulty in following conversations, especially more than one at a time (such as in a group of people and especially in a crowded room). Verbal instructions may need to be repeated. This can be extremely embarrassing.

One of the problems many people have described is an inability to concentrate, which of course is related often directly to the pain level; as the pain goes up, so the ability to cope with concentrating goes down, although it isn't necessarily a linear relationship, being rather more exponential, with higher levels of pain dramatically reducing ability to take in information.

Often people find that at reasonable pain levels (4-6 out of 10) they can function reasonably well, can hold a fairly coherent conversation, I can write letters or e-mail and use information to perform tasks. They can read a book and remember from page to page what the plot is.

However, above this, concentration becomes more sporadic and difficult to maintain.

At a pain level of 6-8, conversational abilities may decline (some people say they are unable to finish sentences) and the individual becomes less able to easily cope with activities such as cooking a meal (getting everything ready at the appropriate time, rather than the physical aspects).

Recreationally, they may be able to cope with watching a film, but nothing too heavy going.

Reading may be rather trickier and may require re-reading pages because of being unable to remember what has happened.

Above a pain level of 8 out of 10, people describe themselves as poor company; irritable and with a diminished memory capacity and poor concentration span, which impinges on conversational ability.

At this level, activities are quite limited and may be reduced to simply sitting in a semi-hypnotic trance in front of the TV as distraction.

A paper entitled "Anxiety and related factors in chronic pain" published in the Spring 2002 edition of *Pain Research and Management* (official journal of the Canadian Pain Society)

describes the effect of 'pain catastrophising' (see below under Describing Our Illness) which was shown in a study to substantially 'enhance attentional interruption by pain', in other words, negative attitude to pain, especially fear, makes the difficulty in thinking clearly worse.

One sufferer of chronic pain describes the effects thus:

'The means by which I kept touch with the external environment had been reduced to pain. My position in relation to the ground and to others could only be perceived by painful signals.

My thoughts, my conversation, were so heavily infused with the pain I was feeling that it was not authentic conversation and not reasonable thought.

For example, I resent the effort necessary to write this down, because I am in pain.' (Henry, a physician with low back pain, quoted on the European Initiative for Pain website.)

He goes on to say:

'Because terrible, overriding pain confiscates your body and your mind. Another moment will be another moment of pain. If one is to be tormented, what matters?

How does one hold a close relationship to a spouse, if the spouse's talk seems trivial, almost no matter what the subject? In the middle of a fire, you do not care about the evening news, the neighbours, or a new dress.

It is difficult being any kind of company, as quiet isolation is the best place to endure pain, until it becomes a kind of imprisonment, when one ventures out into the human world again, clearly as a visitor now, and not as a real member of the race.'

Unsurprisingly, all these problems have knock-on effects that make our already hard lives just that bit harder still.

It is impossible not to get concerned at having our minds turned to 'mush' and naturally we tend to find it exceedingly distressing at times. Not only that, but it can be very stressful and anxiety-provoking, especially in today's speedy world where everyone else seems to know precisely where they're going and everything they need to do to get there.

Those who have prided themselves on being highly organized may find this is one of the skills that go by the board when they are on a lot of medication.

One of the problems may be that neither the sufferer nor their partner realise the extent to which medication is causing impairment.

After all, often there is no outward appearance of sedation or confusion as such (especially if it is being 'covered up'). It is possible to become lulled into a false sense of security by an apparent 'normality'.

Probably normal everyday life does not prove too much trouble, but any added problems such as moving house or family difficulties may stretch capabilities to breaking point.

It is unsurprising that we may end up seriously questioning our mental health and worrying about what we perceive as a one-way mental decline.

Many people feel that no matter what arachnoiditis does to their bodies, at least their minds remain untouched, but they can end up questioning their mental abilities all the time.

Often people lose a great deal of self-confidence and feel a failure.

They may want to avoid making decisions in case of making a mistake, and also tend to avoid social situations that might involve embarrassment.

At it's worst, this can lead to isolating oneself too much and some people find that their relationships have foundered upon the rocks of broken-down communication.

There are a number of reasons for these sorts of problems. Chief amongst these is, of course, pain itself, the usual suspects also including fatigue, headaches, stress and anxiety (which impair attention span) and depression.

Of course, one of the main culprits is medication. Rarely is this sort of trouble directly related to the arachnoiditis disease process itself.

### **Medication-related problems:**

Cognitive impairment is well recognised with sedative medication such as opiates (morphine and related drugs), antidepressants, benzodiazepines (e.g. diazepam) and anticonvulsants such as gabapentin.

(With the latter, numerous people have anecdotally described significant problems, especially with short-term memory, and my own experience was that it affected me significantly).

Of course, often arachnoiditis sufferers need to take a combination that makes this sort of problem more likely.

However, people may describe 'cognitive impairment' when they are not taking much in the way of medication. In this situation, the general debility brought about by arachnoiditis and in particular, the insistent nagging pain is probably the source of the problem. Disturbed sleep is of course, unlikely to improve matters.

### **Identifying the problem**

Neuropsychological testing can be carried out, but it is probably best to take some simple steps to minimise the secondary problems and adapt to the limitations, which in most cases are fairly mild (and not progressive).

The important thing to remember is that these symptoms do not signify serious illness, especially mental illness nor mental decline (dementia).

The role that pain may play needs of course to be addressed, as well as that of any anxiety or depression. Measures to treat insomnia may be required. Reassessment of medication is often helpful.

Other than that, it comes down to common sense measures that ease the difficulties.

These steps might include:

- Requesting support and assistance from family/friends
- Keeping social contacts easy, one-to-one if necessary
- Using written communications rather than telephone
- Using memo pads to note important information
- Being as organised in daily life as possible: calendars, schedules of daily tasks
- Delegating more stressful tasks
- Addressing anxiety or depression
- Addressing insomnia or disturbed sleep
- Reassessing medication with GP or pain clinic