

Everyone has experienced pins and needles at some point, whether it is an arm or leg 'falling asleep' after being lain on for a while, or we have knocked our funny bone.

The trouble is, that with arachnoiditis, pins and needles become a permanent fixture.

Whilst not exactly painful, if strong, they can be distressing or annoying, and of course they are often only one feature in amongst a variety of other sensory signals, most often pain.

Pins and needles, or paraesthesiae, to give them their technical term, arise when the nerve is damaged in some way, and are thought to represent showers of abnormal nerve impulses arising from an ectopic focus (i.e. not a normal area).

The term paraesthesiae encompasses a wide variety of abnormal sensory experiences, which tend to be described as:

- Burning
- Tingling
- Prickling
- Feeling of warmth
- Feeling of cold
- Trickling water
- Insects crawling on the skin
- Insect bite
- Itching

These sensations can arise from central nervous system abnormalities or peripheral nerve damage (peripheral neuropathy is a common cause).

They are most commonly experienced in the feet, hands, arms and legs, but can occur anywhere on the body.

### EXAMINATION FOR SENSORY ABNORMALITIES:

Physical examination will include tests of pin-prick, light touch (usually a wisp of cotton) and vibration (using a tuning fork).

There will also be assessment of any associated weakness. Sensory testing is known to be somewhat arbitrary, but broadly speaking should enable *sensory mapping* which can help doctors differentiate between the various patterns of paraesthesiae which occur in different conditions:

e.g. diabetic neuropathy is likely to present with a 'glove and stocking' pattern, whereas nerve root damage (likely to be present in arachnoiditis) often appears as a specific area being involved (which is termed *dermatomal*).

### SUMMARY:

There are 3 important points to remember:

1. It is quite possible to have pain or pins and needles without any apparent physical deficit on examination.
2. If pain has become centralised then the areas of sensory abnormality may be more widespread than would be expected from a particular nerve root being affected.
3. One of the features of neuropathic pain is that it may be felt in numb areas.

### ALL IN A SWEAT

Excessive sweating (hyperhidrosis or diaphoresis) occurs when the sympathetic nervous system (part of the autonomic nervous system which regulates involuntary body functions) is running on overdrive.

This seems to be a common problem in arachnoiditis, and is probably in part due to direct effects on the sympathetic chain, which runs alongside the spine, and also partly due to the chronic stress of unremitting pain.

A further reason might be that arachnoiditis patients can experience intermittent low grade fevers and the sweating (especially at night) might be related to this.

Note that sweating can occur regardless of environmental temperature (even in the cold) or emotional state, *cold sweats* are often quite profuse.

Causes:

1. primary = essential = idiopathic : cause unknown
2. secondary: to conditions such as hyperthyroidism (overactive thyroid); menopausal

Primary hyperhidrosis is much more common in the general population than secondary: it usually starts in childhood or adolescence and persists throughout adult life.

Locations include the face, armpits, palms and soles of the feet. It can be a highly distressing condition.

Scalp/facial sweating may also be associated with blushing;

axillary (armpit) sweating can lead to telltale staining on clothes and a rapidly developing strong body odour which can make socialising difficult.

Primary hyperhidrosis occurs in up to 1% of the population.

Secondary hyperhidrosis in arachnoiditis: Aldrete's survey (1) showed 'profuse diaphoresis' in 80% and 'nocturnal diaphoresis' in 42%.

In my 1999 survey, 63% of respondents reported increased sweating. Heat intolerance seems to be a related problem: in Aldrete's survey, 91% of respondents experienced this (in my survey the figure was 58%). Low grade fever occurred in 70%(28% in my survey).

Clearly this is a common problem.

NO SWEAT!

Treatment:

The best bet is to implement some general measures:

Firstly, avoid overheating your home or going to places which are likely to be overheated. If you can, avoid dealing with large temperature fluctuations.

Reduce your caffeine intake.

For menopausal symptoms, HRT can be successful.

- Bathe frequently, but avoid very hot baths/showers as this may well trigger a burst of sympathetic activity and thus profuse sweating.

- Shave underarm hair.
- Change clothes frequently.
- Wear loose-fitting clothes of natural fibers, such as [cotton](#).
- Use [underarm sweat shields](#).
- Use antiperspirants and deodorants.
- Use drying powders.
- Wear cotton socks.
- Wear leather shoes or sandals. Don't use man-made materials.
- Try to use pure cotton bedsheets and nightclothes
- Leave a window ajar at night to allow some air circulation

1. Topical: antiperspirants such as aluminium chloride(20-25% in 70-90% alcohol) applied in the evening 2-3 times a week. However, may become less effective over time (months) and there may be a high incidence of skin irritation. Anhydrol Forte, Driclor solution and ZeaSORB are some of the preparations available.

2. Drugs: no specific treatment, but anticholinergic drugs, which may have been prescribed for pain relief (amitriptyline for example) or bladder control(oxybutinin) may have this beneficial side effect (other less pleasant ones include dry mouth: 'cotton tongue', and difficulty in focusing).

3. Iontophoresis: low intensity electric current (15-18mA) applied to the palms or soles immersed into electrolyte solution. Initially requires several 20 minute sessions per week, gradually increasing the interval between treatments to 1-2 weeks. Results vary, patients with light-moderate sweating may have good results; some find the regime troublesome, time-consuming, and quite expensive.

This method is difficult to apply to the armpit and cannot be used for facial sweating. Side effects include: burning, electric shock, discomfort, skin tingling, skin rash. Sweating will return if the treatment is discontinued.

4. Botulinum toxin injections: invasive so not recommended. (lasts 6 weeks-12 months then has to be repeated)

5. Laser therapy: has not been found to be beneficial.

6. Hypnosis: not been found effective.

7. Sympathectomy: surgical interruption of the nerve impulses from the thoracic ganglia (?endoscopic thoracic sympathectomy): reserved for severe, refractory cases. Although success rates of ETS are over 90% for hand hyperhidrosis and 75-80% for armpit hyperhidrosis, one of the commonest side effects (in around 50-60% of patients) is 'compensatory sweating': the body attempts to compensate for the artificially reduced sweating in the upper chest, back and arms by increasing sweat from face, abdomen, lower back, buttocks and feet. A further 5-10% of patients may develop 'gustatory sweating' which is an increased sweat production when eating. Horner's syndrome may occur in about 1%.

8. Axillary sweat gland removal: z-plasty excision of the sweat glands under the arm; again,

an invasive technique so not recommended except for sever cases.