Paresthesia

Paresthesia refers to an abnormal burning or prickling sensation. This sensation is generally felt in the hands, arms, legs, or feet. It may occur in any part of the body. The sensation arises spontaneously. It can begin without apparent stimulus. It is usually not painful. It, may also be described as:

- Tingling or numbness.
- Buzzing.
- Skin crawling.
- Itching.

Most people have experienced temporary (*transient*) paresthesia at some time in their lives.

CAUSES

Paresthesia occurs whenever inadvertent pressure is placed on a nerve and causes what many describe as a "pins and needles" feeling. The feeling quickly goes away once the pressure is relieved.

For some people, however, paresthesia can become a chronic condition caused by an underlying disorder. The underlying disorder can be from:

- Traumatic and direct injury to nerves:
  - Broken neck.
  - Fractured Skull.
- Disorders affecting the central nervous system (the brain and spinal cord), such as:
  - Transverse myelitis.
  - Encephalitis.
  - Transient ischemic attack.
  - Multiple sclerosis.
  - Stroke.
  - A tumor or blood vessel problem such as an arteriovenous malformation pressed up against the brain or spinal cord.
- A wide range of conditions can also damage peripheral nerves (*peripheral neuropathy*). Peripheral nerves are nerves that are not part of the brain and spinal cord. These conditions include:
  - Diabetes.
  - Hypothyroidism.
  - Vitamin B12 deficiencies.
  - Alcoholism.
  - Heavy metal poisoning (lead, arsenic, and other metals).
  - Nerve entrapment syndromes, such as carpal tunnel syndrome.
  - Rheumatoid arthritis.
  - Systemic lupus erythematosus.

  Paresthesia caused by peripheral neuropathy may be accompanied by pain.

DIAGNOSIS

Diagnosis is based on determining the underlying condition causing the paresthetic sensations. Essential to the diagnosis are an individual's:

- Medical history.
- Physical examination.
- Laboratory tests.

Your caregiver may order additional tests depending on the suspected cause of the paresthesia.

TREATMENT

The appropriate treatment for paresthesia depends on accurate diagnosis of the underlying cause.

WHAT WILL HAPPEN

The prognosis for those with paresthesia depends on the severity of the sensations and the associated disorder(s).

RESEARCH BEING DONE

The NINDS supports research on disorders of the brain, spinal cord, and peripheral nerves that can cause paresthesia. The goals of this research are to increase scientific understanding of these disorders and to find

ways to prevent, treat, and cure them.

Research is continually being done to learn more about this problem.
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