Medical Memoranda

Nasal Pain after Injury : Cure by Procaine

Causalgia is a state resulting from injury involving a peripheral nerve. It consists of persistent burning pain, usually beginning at the site of injury and often radiating for some distance from this point. The pain may continue intermittently for months or even years. It may begin at the time of injury, or its onset may be delayed for days or weeks. The skin over the affected area is frequently hot and red. Causalgia has been reported many times after injury to the median and sciatic nerves, but we can find no reference to the condition after injury to the nose.

CASE REPORTS

Case 1.—A man aged 32 attended because of intense burning pain over the centre of the bridge of the nose, slightly to the left side. This had been occurring at intervals of a few days since he had received a violent blow on the nose while playing football 14 months before. Nothing abnormal could be found on clinical examination, and an x-ray film of the paranasal sinuses was normal. The affected area was infiltrated with 2% procaine. No further pain was felt, and when he attended three months later he was still free from pain although sensation over the injected area was normal.

Case 2.—A girl aged 11 had injured her nose in a fall 18 months previously and since then had experienced severe burning pain to the left side of the nasal bridge and spreading down to the tip. The pain occurred almost every night and kept her awake at times. The affected area felt hot and the skin was often red. Nothing abnormal could be seen on examination. Her sinuses had been radiographed twice since the injury in case the pain was referred from an infected sinus, but both films were normal. The area where the pain began was infiltrated with 1% procaine. No pain has been felt during the seven months since this was done.

Case 3.—A man aged 20 was involved in an accident and suffered a blow on the nose. About two months later he began to have pain of a burning or stabbing nature over both sides of the nose at the junction of the nasal bones and cartilages. The pain lasted for about an hour and radiated down to the alae nasi. Injection of 2% procaine over the point of origin of the pain resulted in cessation of all pain, and three months later he was still free of pain. In this case litigation is pending in connexion with the accident.

Case 4.—A man aged 24 received a blow from a fist to the left side of the nose and for nearly two years after this he had frequent pain of a burning nature, lasting for hours at a time, down the left side of the nose. Physical examination was negative and sinus films were clear. Injection of 2% procaine again resulted in immediate cessation of pain. There has been no pain in the eight months since this procedure was carried out.

COMMENT

Causalgic pain seems to occur after injuries causing incomplete division of a nerve and when scar tissue forms around nerve lesions. The origin of the term "causalgia" has been attributed to Weir Mitchell *et al.* (1864). Many theories to explain the phenomenon have been advanced and most of these attribute the pain and the typical appearance of the skin to vascular changes; it has been found that sympathectomy is of value in

a large number of cases but useless in many others. It seems certain that the pain disappears gradually over a period of years, as numerous cases were observed after the two world wars, but most of these had cleared up some years later without specific treatment. It is to be expected that the injection of procaine as in the cases described would be followed by relief of pain, but it is somewhat surprising that the relief has continued for months after the return of normal sensation to the area infiltrated. It must be mentioned that many observers believe that psychogenic factors play an important part in causalgia.

In each of the cases treated the pain began at the point where the external nasal nerve emerges on to the dorsum of the nose between the nasal bone and the lateral nasal cartilage, and in some cases it spread down the nose from this point. We could find no relation to other physical or mental stimuli, a feature often noted with other forms of causalgia. In one case the pain occurred mainly when in bed, and this may be related to a raised environmental temperature.

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G. FENNELL, L.R.C.P.&S.I., D.L.O.,
Senior Registrar, E.N.T. Department,
the Hospital for Sick Children, Great Ormond Street,
London.

D. M. L. WILLIAMS, M.R.C.S., L.R.C.P.,
Registrar, E.N.T. Department, United Sheffield Hospitals.

REFERENCE

Mitchell, S. W., Morehouse, G. R., and Keen, W. W. (1864). *Gunshot Wounds and Other Injuries of Nerves*. Lippincott, Philadelphia.

Addison's Disease in a 6-year-old Boy

Addison's disease is uncommon in children of all ages: 106 cases have been reported in the world literature. Jaudon (1946) found 62 cases described before June, 1945. Williams and Robinson (1956) reported four cases in infancy. Welch (1957) summarized a further 29 cases since Jaudon's account and added one more. Malloy and Woodruff (1958) described the disease in three 6-year-old boys. Shephard *et al.* (1959) reported the disease in two sisters with corticoid deficiency unassociated with hypoadosteronism. Szczepańska and Sapiecha (1959) described a case of Addison's disease and hypoparathyroidism in a 5-year-old girl. Both Mitchell and Rhaney (1959) and Boyd and MacDonald (1960) reported adrenocortical insufficiency in two infant siblings.

These patients may conveniently be divided into three age-groups: group A, over 10 years old—the majority; group B, under 2 years old—a well-defined group (Williams and Robinson, 1956; Mitchell and Rhaney, 1959; Boyd and MacDonald, 1960); and group C, 2–10 years old—the disease is rare in this age-group: twelve of Jaudon's cases, a further 12 in Welch's summary and his own case, those of Malloy and Woodruff, and that of Szczepańska and Sapiecha comprise a total of 29.

Of the 17 cases in group C described since 1946, six were associated with hypoparathyroidism or moniliasis or had a sibling with this group of diseases (Welch, 1957; Malloy and Woodruff, 1958; Szczepańska and