A NEW APPROACH TO THE TREATMENT OF HERPES ZOSTER

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Herpes zoster is a self-limiting disease which usually runs its course in about 2 weeks. Recovery is usually complete, but now and then the doctor has to deal with an elderly patient suffering from a post-herpetic neuralgia, especially of the supra-orbital ophthalmic type which is probably foremost in severity and intractability.

The neuralgia has been defined as 'the ghost of a herpes zoster which has run its course and cannot find rest'.

Herpes zoster is not commonly seen in my practice, but all of a sudden, within 10 days, 4 patients presented themselves for treatment.

The literature is replete with various treatments, none of which is either specific, or generally accepted. It is interesting to note that good results were claimed by several writers: Appleman[1] used ACTH. Marshall[2] claimed very favourable results with the topical application of 1% hydrocortisone ointment, and it occurred to me that hydrocortisone injections might be more effective. Hydrocortisone has been proved very beneficial in numerous cases of acute pain, e.g. in 'tennis elbow', periarticular arthritis, bursitis, etc. The problem was which site and what quantity to use, and also the likelihood of side-effects and reactions.

The consensus of opinion seems to be that herpes zoster is caused by a virus, and the inflammatory and infective nature is borne out by the fact[3] that the skin eruption is secondary to the affection of one or more bulbar or spinal roots, and the herpetic vesicles are distributed in the precise cutaneous territory related to these roots. The virus is thought to travel distally along the nerves, to be deposited at their terminal endings.[4] According to Head and Campbell,[5] 'pain and transient temperature precede the skin eruption'.

It is recognized that hydrocortisone has a favourable effect on inflammatory and oedematous tissues. Experience has taught me that the addition of 2% procaine hydrochloride mixed with the hydrocortisone produces a rapid local analgesia and thus renders the injection quite painless, but hydrocortisone injected by itself into a painful area can produce an acute reaction for 24 hours or so.

The following is a brief account of my experiences with 4 cases:

Case 1

A female, aged 50, consulted me within 36 hours of the appearance of the typical vesicular rash which was on the right side of the chest along the 5th and 6th dorsal nerves. I injected 25 mg. in 1 c.c. of hydrocortisone acetate with 3 c.c. of procaine, first deep into the posterior root near the spines of 5th and 6th dorsal vertebra and repeated the same procedure just proximal to the 2nd crop of vesicles. I decided not to do any block anaesthesia proximal to the 3rd crop of vesicles, because I thought that by blocking the first two areas of vesicles I should arrest the spread of the virus along the nerve path. The result was dramatic; the pain disappeared almost immediately and within 24 hours the vesicles began to form crusts and there was no further outbreak or spread of the herpetic eruption. The patient made an uneventful recovery.

Case 2

A female, aged 60, who had had 'shingles' for about 1 week. She, too, had the eruption on the right side of her chest, but in her case the 5th, 6th and 7th dorsal nerves were involved and she had large eruptions of vesicles all along the distribution of the subcostal nerves. I decided to do a block anaesthesia of the 5th and 6th nerves only and see what would happen to the 7th nerve which would act as a control. I injected 50 mg. of hydrocortisone in 3 c.c. of procaine in the posterior nerve roots of the 5th and 6th dorsal vertebrae followed by 25 mg. of hydrocortisone acetate in 2 c.c. of procaine along the largest distribution of the herpetic eruption. Here, too, the relief from pain was immediate, except along the distribution of the 7th dorsal nerve which was not injected. The next day the vesicles along the 5th and 6th nerves were painless and rapidly drying up, but the vesicles along the 7th nerve were very much alive and painful. I then repeated the same procedure along the untreated nerve, with complete relief and rapid healing.

Case 3

A male, aged 68, consulted me because of a sleepless night and considerable pain caused by the herpetic eruption which appeared on his chest 24 hours previously. He had an angry-looking rash along the 4th dorsal nerve on the right side. In his case too, I followed the same procedure as in the previous 2 cases, also with dramatic results and a rapid defervescence and healing of the vesicles.

Case 4

A male, aged 72, consulted me because of a post-herpetic neuralgia affecting mainly the right eyebrow. The pain radiated over the frontal bone and spread out in a fan shape towards the sagittal suture of the frontal and the right parietal bones. His attack had occurred suddenly 15 months previously and he had been confined to bed in a local nursing home and had had a variety of treatments which produced only temporary relief. He was in a desperate state and had decided to seek medical advice overseas because he felt nothing further could be done for him in South Africa. One week before sailing for London he consulted me. He looked and felt very dejected because of the acute pain and lack of sleep and the possible danger to his vision. I injected 12 mg. of hydrocortisone acetate with 2 c.c. of procaine hydrochloride into the area of maximal swelling and tenderness over the right supra-orbital ridge. The patient experienced almost immediate relief over the eye, but there was still a good deal of pain in the non-injected areas. The next morning he informed me that for the first time in 15 months he had had a good night's sleep. He had 5 daily injections into the 'trigger' points, the oedema subsided, and he seemed much more comfortable. He appeared again in my rooms after 4 months of absence overseas. It appears that he did not, while in London, have any treatment for his facial herpes zoster, and he came back for more injections because he still had some areas of tenderness over the parietal and frontal regions.

COMMENT

It would appear that the hydrocortisone acetate and procaine hydrochloride seem to have had a beneficial effect both in arresting and relieving the neuralgic pain in herpes zoster.

These 4 cases do not permit of any generalization, but it would be interesting to hear from others of any cases treated by this method on a large and controlled scale. Some workers claim a superiority of prednisolone over hydrocortisone, but I have had no experience with the local injections of prednisolone. I may also state that I did not encounter any side-effects or local reactions from the combined injections. I mix the hydrocortisone in the same syringe with the procaine and I find that 1 c.c. of hydrocortisone acetate combines well with 3 c.c. of procaine. In the above-quoted cases I relied mainly on the block

anaesthesia, but also prescribed local applications of calamine, e.g. caladryl lotion, salicylates, etc., and an occasional sedative to be taken at night, e.g. nembutol, carbrital, etc.

SUMMARY

Four cases of herpes zoster are described. They were treated by block anaesthesia combined with a steroid, i.e. hydrocortisone acetate. The results seemed uniformly satisfactory and I am of the opinion that the above-described treatment is a valuable aid in the treatment of herpes zoster.

REFERENCES

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