Review: early treatment of acute herpes zoster may prevent or shorten the duration of postherpetic neuralgia


QUESTION: In patients with acute herpes zoster, do any treatments alter the incidence or duration of postherpetic neuralgia (PHN)?

Data sources
Studies were identified by searching Medline (1966 to 28 December 1998) and the Cochrane Controlled Trials Register 1998, by reviewing the reference lists of identified articles, and by doing web based searches.

Study selection
English language studies were selected if they were randomised controlled trials (RCTs) that enrolled patients with acute herpes zoster and that reported on relevant outcome measures (incidence of pain at any time after rash healing or duration of zoster associated pain or PHN).

Data extraction
Data were extracted independently by 2 reviewers on study methods, patient characteristics, intervention type and duration, length of follow up, number of dropouts, and outcome measures.

Main results
42 studies met the selection criteria. The results from 4 RCTs (n = 692) and 4 meta-analyses done using these 4 trials indicated that oral acyclovir, 800 mg 5 times daily for 7–10 days, may reduce the incidence of pain at 1–3 months (numbers needed to treat [NNTs] from 3 of the RCTs range from 4–8 with no reported CIs). The largest of the 4 RCTs found no benefit with acyclovir.

In investigations of newer antiviral agents, 1 study (n = 419) found that famciclovir reduced the duration of PHN at 6 months more than did placebo (NNT 12). This study found that famciclovir had no effect on PHN incidence. 1 study (n = 1141) that compared valaciclovir with acyclovir found that pain persisting for 6 months was lower in the valaciclovir group (19% v 26% on acyclovir, p = 0.02, NNT 17). No placebo comparison was done in this study.

RCTs evaluating the effectiveness of steroids were heterogeneous. Most studies either showed no benefit or the results were indeterminate.

1 RCT (n = 80) investigating the effects of the tricyclic antidepressant amitriptyline found that 25 mg nightly for 90 days starting within 48 hours of rash onset reduced pain incidence at 6 months (16% v 35% on placebo at 6 mo, NNT 6). Acyclovir given by general practitioners was not controlled in this study.

A single trial (n=50) comparing percutaneous electrical nerve stimulation with famciclovir reported a decrease in pain incidence with stimulation at 3 and 6 months, but no statistics were provided.

Conclusion
Limited evidence from randomised controlled trials shows that early treatment of acute herpes zoster with various drugs or modalities decreases the incidence or duration of postherpetic neuralgia.