Reviewer’s report

Title: Epidemiology and Cost of Herpes Zoster and Postherpetic Neuralgia Among Patients Treated in Primary Care Centres in the Valencian Community of Spain.

Version: 1 Date: 21 May 2011

Reviewer: Lluis Salleras

Reviewer’s report:

Major Compulsory Reviews
Major Compulsory Revisions

1. Methods

3rd paragraph: Study measures and definitions

- The authors should detail the criteria set out in the study protocol to consider a case as "herpes zoster." Since the study involved family physicians from 25 primary care centres, unification of diagnostic criteria is essential to avoid interpersonal variability in the selection of cases.

- The authors should detail what degree of pain (scale of 1 to 10) was considered as PHN: Oxman et al. N Engl J Med 2005, 352:2271-84.

- The authors should clarify whether or not the costs of the study include the cost of outpatient or hospital visits due to symptoms occurring in the 3 weeks preceding the vesicular rash, primarily pain, which, in some cases, are diagnosed and even treated as other conditions. If the answer is no, they need to comment on this in the Discussion, as the costs would have been underestimated (Yawn BP et al. Mayo Clin Proc 2009, 84:787-94).

2. Results

2nd Paragraph: Resource consumption and costs of HZ disease

- The authors state that they recorded 23 hospital emergency room visits and 29 diagnostic tests. They should clarify the reasons for these visits (episodes of severe pain, other complications) and diagnostic tests (PCR for confirmation of doubtful cases?)

Paragraph 3.4 Cost of PHN 3

- The authors do not disaggregate the cases of PHN attended by pain clinics. In these cases, the costs are much higher because these clinics are usually in hospitals and, in severe cases, may result in many visits.

3. Discussion
- The authors should compare the costs of their study with those in the study by Yawn et al conducted in Olmsted County, Minnesota, one of the most comprehensive studies on this topic.

- The authors should mention another important limitation of their study. In Spain, many patients often go directly to hospital to be treated in the emergency room without going through their family physician, especially for disorders that the patient perceives as serious. Herpes zoster is perceived as serious in many cases, especially due to the pain or the location of the rash (herpes zoster ophthalmicus, for example). Many hospital emergency rooms make the diagnosis and provide emergency treatment and then refer the patient to the appropriate hospital service (dermatological, ophthalmic). These practices, if they occur in the Valencian Community, could have caused an underestimation of the incidence of the disease as could have visits to private physicians, especially dermatologists.

- The authors should comment that in their study over 90% of patients were treated with specific antiviral drugs, a high percentage when current treatment recommendations are applied. This may have caused an overestimation of costs.

- Comments on the effectiveness of antiviral treatment in the prevention of PHN are irrelevant to the results of the study and could be eliminated from the Discussion.

**Level of interest:** An article of importance in its field

**Quality of written English:** Needs some language corrections before being published

**Statistical review:** Yes, but I do not feel adequately qualified to assess the statistics.