Antibiotics for syphilis diagnosed during pregnancy

24 February 2011

Penicillin is effective in the treatment of syphilis in pregnancy and prevention of congenital syphilis. The optimal treatment regimen has not been established in clinical trials but the recommended standard penicillin dose is safe and effective in uncomplicated cases.

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1. EVIDENCE SUMMARY

The objective of the Cochrane review was to identify the most effective treatment regimen (in terms of dose, length of the antibiotic course and mode of administration) of syphilis in pregnant women, with or without concomitant HIV infection. Any trial using a random or quasi-random method of treatment allocation would be included in the review. However, no such trials could be identified.

The review highlights the fact that penicillin is proven to be effective in the treatment of syphilis in pregnancy and in the prevention of congenital syphilis. The optimal treatment regimen has not been established in clinical trials but the recommended standard penicillin dose is safe and effective in uncomplicated cases.

The methodology presented in the review seems appropriate. However, despite a comprehensive search no trials could be included.

2. RELEVANCE TO UNDER-RESOURCED SETTINGS

2.1. Magnitude of the problem

The rate of syphilis is high in some under-resourced settings. In antenatal clinics in South Africa, when women are routinely tested prevalence rates as high as 13% are reported (1). As with other sexually transmitted diseases, the high rate of illiteracy and low socio-economic status of women contribute to this.

The high prevalence of HIV in these settings is an important factor that complicates the treatment of syphilis. It has been suggested that treatment failures for syphilis are more common in HIV-positive pregnant women (2).

2.2. Feasibility of the intervention

Since penicillin is not only proven to be effective, but is also a cheap drug that is readily available and easy to administer, its administration is feasible in under-resourced settings. However, an optimal treatment regimen has not been established and therefore no intervention is proposed in this review. Until new evidence on the most appropriate regimens for different groups (such as HIV-positive women) become
available the standard recommended doses should be used.

### 2.3. Applicability of the results of the Cochrane Review

Owing to the high rate of prenatal and congenital syphilis in under-resourced settings the question of an optimal treatment regimen is very important in these settings.

### 2.4. Implementation of the intervention

The standard treatment recommended by the Centers for Disease Control and Prevention, Atlanta, GA, USA, in 1998 should be adhered to, i.e. 2.4 million units of benzathine penicillin G intramuscularly in a single dose for patients with primary, secondary or early latent syphilis and 7.2 million units intramuscularly administered in 3-weekly doses of 2.4 million units each for patients with late latent syphilis or latent syphilis of unknown duration (3). This treatment has been shown to be effective and, since no data are available on HIV positive patients, the same regimen should be used for such patients.

### 2.5. Research

As already mentioned, randomized trials to find an exact treatment regimen might not be necessary since the treatment regimens available are already very effective. However, in the subgroup of patients who are HIV positive, and therefore more likely to experience treatment failure with standard regimens, there is a need to study alternative treatment strategies.

This Cochrane review does not address the question of an effective treatment regimen for infants with congenital syphilis, and herein probably lies another urgent question that needs to be answered.

### References