

Cefpodoxime proxetil versus cefixime in acute otitis media therapy

Cefpodoxime proxetil administered once daily (10 mg/kg per day) and cefixime administered once daily (8 mg/kg per day) were compared for efficacy and safety in the treatment of acute suppurative otitis media in pediatric patients.

A total of 368 patients (2 months to 17 years of age) were randomly assigned to received either cefpodoxime or cefixime in a 2:1 ratio (245 cefpodoxime, 123 cefixime); 236 patients (155 cefpodoxime, 81 cefixime) were evaluated for drug efficacy.

Patients received either cefpodoxime proxetil oral suspension (10 mg/kg per day, once daily for 10 days) or cefixime oral suspension (8 mg/kg per day, once daily for 10 days).

End-of-therapy clinical cure rates in evaluable patients were 56% for the cefpodoxime group and 54% for the cefixime group. Clinical improvement rates were 27% for both groups. Clinical response rates were not significantly different between the treatment groups. At long-term follow-up, 17% of the patients in the cefpodoxime group and 20% in the cefixime group had a recurrence of infection. Drug-related adverse events, such as diarrhea, diaper rash, vomiting, and rash, occurred in 23.3% of the patients treated with cefpodoxime and in 17.9% of those treated with cefixime.

These findings suggest that cefpodoxime proxetil administered once daily is as effective and safe as cefixime given once daily in the

treatment of acute suppurative otitis media in pediatric patients.

Asmar BI, Dajani AS, Del Beccaro MA: Comparison of cefpodoxime proxetil and cefixime in the treatment of acute otitis media in infants and children. *Pediatrics* 1994;94:847-852.

Glycemic thresholds for spontaneous abortion and congenital malformations in type I diabetes

This study was conducted to test the hypothesis that women with insulin-dependent (type I) diabetes have a threshold of glycemic control in early pregnancy for increased risks of spontaneous abortion and congenital malformations.

Receiver-operating characteristic curves were formed for the occurrence of abortion and malformations as a function of the median first-trimester preprandial blood glucose concentration and the first measured glycohemoglobin concentration in pregnant women with type I diabetes.

Fifty-two of the 215 women (24%) who enrolled before 9 weeks' gestation had spontaneous abortions. Six percent of the women enrolled before 14 weeks had infants with major congenital malformations. Thresholds for an increased risk of abortion and malformations were a median first-trimester blood glucose concentration of 120 mg/dL to 130 mg/dL or an initial glycohemoglobin concentration of 12% to 13%.

The authors found that type I diabetic women with initial glycohemoglobin concentrations in

pregnancy above 12% or median first-trimester preprandial glucose concentrations above 120 mg/dL have an increased risk of abortion and malformations. Below these glycemic thresholds, the risks are comparable to those in nondiabetic women.

Rosenn B, Miodovnik M, Combs CA, et al: Glycemic thresholds for spontaneous abortion and congenital malformations in insulin-dependent diabetes mellitus. *Obstet Gynecol* 1994;84:515-520.

PSA density in the detection of prostate carcinoma

Prostate specific antigen (PSA) does not appear to have the specificity to differentiate prostate cancer from benign prostate hyperplasia (BPH) because of overlap in their respective PSA levels. In fact, 21% to 43% of patients with prostate cancer have a PSA within the normal range (0-4.0 ng/mL), whereas 25% to 40% of men with BPH have a PSA above this normal range.

PSA density is thought to be more sensitive and specific than is PSA alone, but this theory remains controversial.

To evaluate the clinical value of PSA density, the authors retrospectively reviewed 220 carcinomas in radical prostatectomy specimens and examined the relationship of PSA and PSA density to prostate volume, Gleason sum, and pathologic stage.

The findings show that PSA density is more sensitive than PSA in diagnosing carcinoma in the PSA of 4.0 ng/mL or less group. In fact, the PSA density cutoff of