COCHRANE PRIMARY HEALTH CARE FIELD

PEARLS Practical Evidence About Real Life Situations

Interferon beta is effective for delaying progression to multiple sclerosis

Clinical question	How effective are immunomodulatory drugs (glatiramer acetate or recombinant interferon beta) in preventing conversion from clinically isolated syndromes (CIS) to clinically definite multiple sclerosis (CDMS)?
Bottom line	Compared to placebo, interferon beta is effective in preventing the conversion from CIS to CDMS (ie, prevention of a second attack) over 2 years of follow-up. There is no evidence delaying a second clinical or MRI detected attack has any effect on delaying disability outcomes.
Caveat	Some limitations in the interpretation of the results are implied by analysis of the quality of the studies. In one trial no clear information about blinding of the investigators involved in treatment and evaluation is provided. In another trial the number of patients lost to follow-up during the second year is high (around 40%) due to early trial terminations. No trials tested the efficacy of glatiramer acetate.
Context	Multiple sclerosis is a chronic, inflammatory, demyelinating disease of the central nervous system that most commonly affects women, with an onset typically between 20 and 40 years of age. It is the most common cause of neurological disability in young adults.
Cochrane Systematic Review	Clerico M et al. Recombinant interferon beta or glatiramer acetate for delaying conversion of the first demyelinating event to multiple sclerosis. Cochrane Reviews 2008, Issue 2. Article No. CD005278. DOI: 10.1002/14651858. CD005278.pub3. This review contains 3 trials involving 1160 participants.
PEARLS 110, August 2008, written by Brian R McAvoy	

[References]

PEARLS are succinct summaries of Cochrane Systematic Reviews for primary care practitioners. They are funded by the New Zealand Guidelines Group.

PEARLS provide guidance on whether a treatment is effective or ineffective. PEARLS are prepared as an educational resource and do not replace clinician judgement in the management of individual cases.

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