



Title Interferon-Based Therapies for Chronic Hepatitis C Virus Infection: An Assessment of Clinical Outcomes

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Aim

- To explore the effectiveness of interferon-based combination drugs by examining mortality and serious morbidity during treatment of chronic hepatitis C virus (HCV) infection.
- To consider the withdrawals due to adverse events, the quality of life, and the virologic markers related to use of the following recommended treatments:
 - Standard interferon (IFN) plus ribavirin versus standard IFN therapy alone
 - Standard IFN plus ribavirin versus pegylated IFN plus ribavirin.

Conclusions and results

Fifty-three unique randomized controlled trials describing treatment of adults with persistent, detectable viremia from HCV infection were identified. Fifty-one of these trials randomized at least one treatment arm to receive standard IFN plus ribavirin and another to receive standard IFN alone. The remaining two trials provided evidence of the effect of using pegylated IFN combined with ribavirin versus standard IFN and ribavirin. Results of the meta-analysis indicated that information is lacking on quantity or quality of life related to IFN-based treatment. Also, morbidity and mortality after therapy with ribavirin added to standard IFN could not be estimated from the randomized trial evidence. Pegylated IFN combined with ribavirin can increase the need for urgent medical attention when compared with standard IFN plus ribavirin. Pegylated IFN plus ribavirin therapy can reduce the risk of persistent viremia and liver enzyme elevation to the greatest degree, when it is compared with standard IFN plus ribavirin therapy, or with standard IFN therapy alone.

Recommendations

Not applicable.

Methods

Reports of randomized controlled trials were identified from a comprehensive systematic review conducted by the Agency for Health Research and Quality (AHRQ) in 2002. Supplemental trial reports were identified from bibliographic databases, manufacturer's information, and from the United States Food and Drug Administration's website. A meta-analysis was conducted on these studies to determine the incidence of death and serious morbidity by analyzing the serious adverse events occurring during the clinical trials and the withdrawals due to adverse events. Data were abstracted by two independent reviewers.

Further research/reviews required

Information on quantity or quality of life related to IFN-based treatment is lacking.