

Viewpoints

Early Treatment with Ribavirin may be Considered

For high risk RSV or influenza infected patients

Ribavirin is an antiviral agent of use in the treatment of Lassa fever and some respiratory infections. The low cellular toxicity has meant that few, mainly reversible haematological, adverse effects are seen with its use. The spectrum of activity of ribavirin is unusually broad and encompasses a wide range of RNA and DNA viruses including influenza types A and B, parainfluenza types 1, 2 and 3, respiratory syncytial virus and possibly coronavirus. The main focus of its action is in alterations of nucleotide pools and interference with viral messenger RNA.

Respiratory syncytial virus is responsible for a large number of hospital admissions of infants and young children each year. Normally, mortality is low but it is raised in infants with underlying congenital heart disease, those who are immunocompromised, those with bronchopulmonary dysplasia and cystic fibrosis, and elderly patients in nursing homes. Both normal infants and those with bronchopulmonary dysplasia and/or congenital heart disease with respiratory syncytial virus infections have shown improvement after treatment with ribavirin. Resistance has not developed during trial administration of the drug and reductions in viral shedding may decrease the nosocomial spread of infection. Ribavirin has been successfully administered via aerosol and delivery via infant oxygen hood, oxygen tent, respirator or face mask mean a directly local application and less chance of a systemic reaction. This therapy, because of the inconvenience of administration, should be considered primarily for high risk patients, '... before onset of life-threatening disease or confirmation of the diagnosis by laboratory means'.

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