Saline in Acute Bronchiolitis RCT and Economic evaluation: hypertonic saline in acute bronchiolitis – randomised controlled trial and systematic review

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Plain English summary

Saline in Acute Bronchiolitis RCT and Economic evaluation study

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Plain English summary

Acute bronchiolitis is the most common cause of babies being admitted to hospital. It can be caused by any of the common cold viruses, although most cases are caused by the respiratory syncytial virus. If the virus gets into the lungs, it can cause difficulties in breathing on top of the head cold. The worst-affected babies require oxygen and help with feeding until they clear the virus themselves. Many treatments have been tried, but in all cases they were shown to be ineffective when properly tested. Most recently, it has been suggested that inhaling a mist of 3% hypertonic saline (salt water) from a nebuliser would reduce the length of time that babies spend in hospital. To test this suggestion, we undertook a trial and recruited 317 babies from 10 hospitals. All had bronchiolitis that was severe enough at admission for the babies to require treatment with oxygen. All received what is considered to be the best standard of care. Half of the babies were also treated with nebulised 3% saline every 6 hours. We found that the nebulised treatment had no effect on the time it took for babies to be ready for discharge and we were unable to demonstrate any benefit from its use. The treatment itself caused side effects in a few babies, such as excessive coughing and a fall in blood oxygen levels.

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