Daily low-dose prednisolone to prevent relapse of steroid-sensitive nephrotic syndrome in children with an upper respiratory tract infection: PREDNOS2 RCT

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Plain English summary

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Scausing generalised swelling. In most children, the condition recurs or relapses. Relapses often occur following an upper respiratory tract infection (i.e. a cough, cold or sore throat).

Research in tropical countries suggests that if children have a small dose of daily steroids for a week at the time of an upper respiratory tract infection then they are less likely to relapse. The selection of children for these studies and the different patterns of infection mean that we are not certain if this treatment would work in the UK.

A total of 365 children with relapsing nephrotic syndrome took part. Half of the children took a steroid and the other half took dummy tablets (placebo) for 6 days at the start of an upper respiratory tract infection. We followed up the children for 12 months and collected information on relapses and other treatments and information from questionnaires about behaviour and quality of life. We also investigated whether or not there were cost savings with this treatment.

There were 271 children who had an upper respiratory tract infection in the 12 months of the study and so only these children were included in the analyses. Giving 6 days of a low-dose steroid at the time of an upper respiratory tract infection did not reduce the risk of a relapse. There was also no effect on the overall number of relapses, the number of children needing to start extra preventative treatments or side effects of steroids. Although there was no clinical effect, the economic evaluation found that giving prednisolone led to lower treatment costs overall and higher quality of life and might, therefore, offer better value for money, but this has to be interpreted against the clinical evidence of no significant effect.

Our conclusion is that there is no clinical benefit to giving children low-dose prednisolone at the time of an upper respiratory tract infection.

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