Temporarily quadrupling the dose of inhaled steroid to prevent asthma exacerbations: FAST

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Plain English summary

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Asthma is one of the commonest long-term diseases worldwide. Asthma attacks are characterised by worsening of asthma symptoms (such as coughing and shortness of breath) and sometimes require treatment with oral steroid tablets, which are unpopular because they can cause severe side effects.

It is widely believed that using asthma self-management plans can reduce asthma attacks and help people get on with their lives. The previous study suggested that a self-management plan that included a temporary fourfold increase in the use of their steroid inhaler when asthma symptoms were increasing was good at reducing asthma attacks; however, a larger study was needed to be sure of the results.

The Fourfold Asthma STudy (FAST) tested whether or not an asthma self-management plan that advised a temporary fourfold increase in the use of the steroid inhaler when asthma symptoms started to worsen could prevent asthma attacks. A total of 1922 people with asthma took part in the study and a computer was used to decide whether participants received the trial self-management plan or usual care. Participants were asked to attend visits at 6 and 12 months as well as any time their asthma started to worsen to assess the impact of the plan.

The trial self-management plan was given to 957 participants, of whom 562 experienced worsening asthma symptoms. The participants who increased their inhaled steroid dose fourfold saw a reduction in the number of asthma attacks compared with the usual-care group, by about 20%.

Overall, the trial suggested that a temporary fourfold increase in inhaled steroid at the point at which asthma worsened reduced asthma attacks. The fourfold increase in inhaled steroid also reduced reported emergency general practitioner/hospital visits and the number of steroid tablets prescribed per participant and, overall, was better value for money. Approximately 15 people with asthma need to be taught to use such a plan to prevent one severe attack.
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