

Hydrocortisone does not prevent lung complication in extremely preterm infants

March 24 2022



Credit: Pixabay/CC0 Public Domain

Hydrocortisone is no more effective than placebo at preventing damage that can result from oxygen and ventilator therapy necessary to keep

preterm infants alive, according to research funded by the National Institutes of Health. The study of a potential treatment for the condition, known as bronchopulmonary dysplasia, appears in the *New England Journal of Medicine*.

In recent years, hydrocortisone was considered as a replacement for the widely used drug dexamethasone in the prevention of bronchopulmonary dysplasia. Both drugs inhibit the inflammation thought to contribute to BPD, but animal studies suggested that hydrocortisone would have fewer effects on the developing brain. Infants born preterm have higher rates of death and disability.

The study enrolled 800 infants born before the 30th week of pregnancy who had been on a ventilator for at least seven days. From 14 days to 28 days, in addition to receiving standard care and ventilator therapy, infants were randomly assigned to receive either hydrocortisone or a placebo. Of the hydrocortisone-treated infants, 16.6% survived to 36 weeks without moderate or severe [bronchopulmonary dysplasia](#), which did not differ significantly from 13.2% in the placebo group. The rate of neurodevelopmental impairment did not differ significantly between the groups (36.9% vs. 37.3%). The hydrocortisone group was more likely to need [drug treatment](#) for hypertension than the [placebo group](#) (4.3% vs. 1.0%).

More information: Hydrocortisone to improve survival without bronchopulmonary dysplasia. *New England Journal of Medicine*. 2022. [DOI: 10.1056/NEJMoa2114897](https://doi.org/10.1056/NEJMoa2114897)

Anne Greenough, Hydrocortisone to Prevent Bronchopulmonary Dysplasia—Not a Silver Bullet, *New England Journal of Medicine* (2022). DOI: 10.1056/NEJMe2200247

Provided by National Institutes of Health

Citation: Hydrocortisone does not prevent lung complication in extremely preterm infants (2022, March 24) retrieved 18 June 2024 from <https://medicalxpress.com/news/2022-03-hydrocortisone-lung-complication-extremely-preterm.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.