No impact of rotavirus vaccination on childhood seizure hospitalizations in England

Dr Rachael Biggart
Academic Foundation Year 2 Doctor in Paediatric Infectious Diseases

Rachael.Biggart@UHBristol.nhs.uk
Genetic Susceptibility

Non-specific inflammation dysregulation 2nd viral infection

Direct neurotropicy of Rotavirus?

Indirect neurotropicy of Rotavirus enterotoxin?
Protective Association Between Rotavirus Vaccination and Childhood Seizures in the Year Following Vaccination in US Children

Daniel C. Payne,1 James Baggs,2 Daniel18 Eric Weintraub,8 and Umesh D. Parashar1

Brief Report

Trends in Rate of Seizure-Associated Hospitalizations Among Children < 5 Years Old Before and After Rotavirus Vaccine Introduction in the United States, 2000–2013

Kimberly D. Pringle, Rachel M. Burke, Claudia A. Steiner, Umesh D. Parashar, Jacqueline E. Tate

FIND ME: G40*, epilepsy and recurrent seizures, G41*, status epilepticus, R56.0*, febrile convulsions.

FIT: separate regression models by seizure type, age group and peak rotavirus seasonality, offset for English population changes with vaccine use as a covariate.
<table>
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<tbody>
<tr>
<td><strong>England Birth Rate</strong></td>
<td>655357</td>
<td>672809</td>
<td>671058</td>
<td>687007</td>
<td>688120</td>
<td>694241</td>
<td>664517</td>
<td>661496</td>
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<td>Afebrile convulsions (n)</td>
<td>11778</td>
<td>11514</td>
<td>11672</td>
<td>12595</td>
<td>12738</td>
<td>12788</td>
<td>12906</td>
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<td>Rate / 100,000</td>
<td>619</td>
<td>586</td>
<td>584</td>
<td>620</td>
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<tr>
<td>Febrile convulsions (n)</td>
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<td>13597</td>
<td>11705</td>
<td>11987</td>
<td>11267</td>
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<td>10725</td>
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<tr>
<td>Rate / 100,000</td>
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<td>692</td>
<td>585</td>
<td>590</td>
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<td>524</td>
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<td>467</td>
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</table>
March Only Analysis

Afebrile

- <12m: p = 0.87
- 1-2yrs: p = 0.94
- 2-3yrs: p = 0.27

Febrile

- <12m: p = 0.94
- 1-2yrs: p = 0.80
- 2-3yrs: p = 0.01
Lack of impact of rotavirus vaccines on seizure-related hospitalizations in children under 5 years old in Spain.

Ortizo-Sánchez A¹, López-Lacort M¹,², Muñoz-Quijão C¹,², Díez-Domingo J¹,².
"The good news is that since you've been here that vase has become an antique."
thank you!