

Childhood Asthma

MM Haby et al. Thorax. August (2001) Vol.56 #8 p 589.

Interest in childhood asthma continues. Asthma in childhood may persist into adulthood.

This paper reports on research into risk factors for childhood asthma. Much research of this nature seeks to identify a controllable environmental risk factor such as pollution, without setting these in the context of more natural causes. This work reports on the more natural context along with some of the usual suspects.

Data about lifestyle factors was obtained from the parents of 974 children in Australia. Age at the time of research was between 3 and 5, 98% of children were white.

Caseness was defined as:

- Wheeze or cough in past year and
- diagnosis of asthma and
- taking asthma medication in last 12 months.

A skin prick test for atopy (6 common allergens) was applied.

Consumption of polyunsaturated fat was defined as "low", if never used on bread or cooking and "high", if usually used.

The study found that the prevalence of childhood asthma was 18 to 22%.

The following statistically significant risk factors were determined:

Risk Factor	Odds Ratio	95% CI
Atopy	2.35	1.49 to 3.72
Parental history of asthma	2.05	1.34 to 3.16
Serious resp infection in 1 st 2 years of life.	1.93	1.25 to 2.99
Polyunsaturates high.	2.03	1.15 to 2.99
Ever breast fed*.	0.41	0.22 to 0.77
3 or more older siblings	0.16	0.04 to 0.71

*inverted, is reported to be equivalent to an OR of 2.45 for never breast fed.

Comment

Innocent causes of childhood asthma abound. It would be of interest to determine what proportion of childhood asthma cases were associated with a combination of all or some of the above "innocent" risk factors. Such a figure would be useful in estimating the proportion of people exposed to a potentially guilty cause, who must have asthma, for the odds ratio to exceed 2.0. Further analysis of the original data would be required to determine this proportion.

The authors suggest the above findings provide support for the theory that active immune systems in early childhood are protective against asthma.

