1歳時に3歳時のアレルギー疾患をある程度予測できるという論文です。

## 背景

アトピーマーチは乳児期のアトピー性皮膚炎から後期小児期の喘息・アレルギー性鼻炎へと進行すると言われている。カナダの出生コホートにおいてアレルギー感作が3歳時のアレルギー疾患へ進展するか否かを調査した。

# 方法

1 歳時に皮膚プリック試験を行った。10の吸入または食物抗原に対して陰性コントロールよりも膨疹径が2mm以上大きければ感作されているとした。アトピー性皮膚炎は英国Working Partyの診断基準を使用して評価した。3歳時に気管支喘息、アレルギー性鼻炎、食物アレルギー、アトピー性皮膚炎があるかを評価した。2311人の小児のデータで解析した。

## 結果

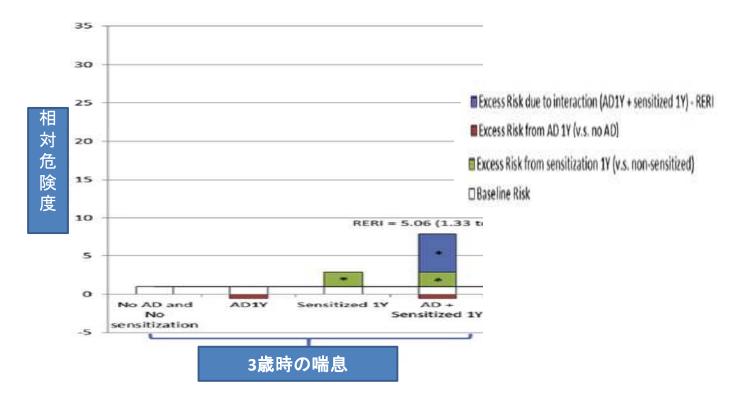
アレルギー感作のないアトピー性皮膚炎は交絡因子を調整後では3歳時の喘息リスクの上昇とは関連しなかった(relative risk [RR], 0.46; 95% CI, 0.11-1.93)。逆にアレルギー感作のあるアトピー性皮膚炎は付加(relative excess risk due to interaction, 5.06; 95% CI, 1.33-11.04)と multiplicative (ratio of RRs, 5.80; 95% CI, 1.20-27.83)スケールで喘息リスクと関連していた。食物アレルギーリスクにおけるこれらの効果でのアトピー性皮膚炎とアレルギー感作との陽性付加的な相合作用がみられた (relative excess risk due to interaction, 15.11; 95% CI, 4.19-35.36)。

#### 結論

アレルギー感作がないアトピー性皮膚炎は喘息リスクと関連しなかった。アトピー性皮膚炎とアレルギー感作は3歳時のアトピー性皮膚炎と食物アレルギーと強い相合効果があった。

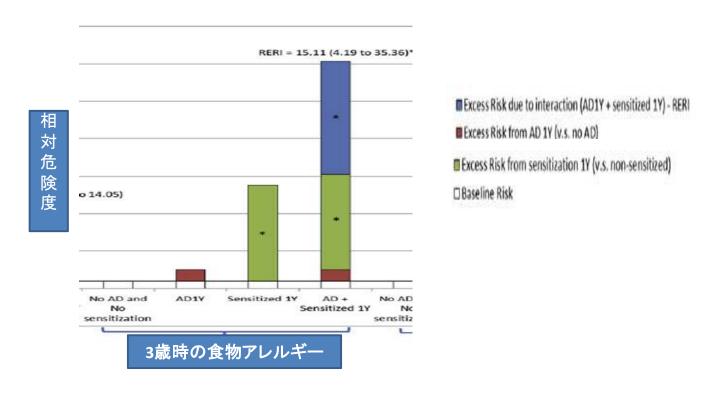
1歳時のアレルギー感作は3歳時の喘息・食物アレルギーをある程度予測出来る可能性がある。

# 1歳時のアレルギー感作のないアトピー性皮膚炎は 3歳時の喘息のリスクと関連しない



RERI: Relative excess risk due to interaction

# 1歳時のアトピー性皮膚炎とアレルギー感作は 3歳時の食物アレルギーの相対リスクがある



RERI: Relative excess risk due to interaction

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# Predicting the atopic march: Results from the Canadian Healthy Infant Longitudinal Development Study.

Tran MM¹, Lefebvre DL¹, Dharma C¹, Dai D¹, Lou WYW², Subbarao P³,

Becker AB⁴, Mandhane PJ⁵, Turvey SE⁶, Sears MR⁷; Canadian Healthy

Infant Longitudinal Development Study investigators.

# **Collaborators (41)**

Subbarao P, Turvey SE, Anand SS, Azad M, Becker AB, Befus AD,

Brauer M, Brook JR, Chen E, Cyr M, Daley D, Dell SD, Denburg JA, Duan

Q, Eiwegger T, Grasemann H, HayGlass K, Hegele RG, Holness DL,

Hystad P, Kobor M, Kollmann TR, Kozyrskyj AL, Laprise C, Lou WYW,

Macri J, Mandhane PJ, Miller G, Moraes TJ, Paré P, Ramsey C, Ratjen F,

Sandford A, Scott JA, Scott J, Sears MR, Silverman F, Simons E, Takaro

T, Tebbutt S, To T.

# **Author information**

1

Department of Medicine, McMaster University, Hamilton, Ontario, Canada.

2

Dalla Lana School of Public Health, University of Toronto, Toronto, Ontario, Canada.

Department of Pediatrics, University of Toronto and Hospital for Sick Children, Toronto, Ontario, Canada.

4

Department of Pediatrics & Child Health, University of Manitoba, Winnipeg, Manitoba, Canada.

5

Department of Pediatrics, University of Alberta, Edmonton, Alberta, Canada.

6

Department of Pediatrics, University of British Columbia, Vancouver, British Columbia, Canada.

7

Department of Medicine, McMaster University, Hamilton, Ontario, Canada. Electronic address: searsm@mcmaster.ca.

# **Abstract**

#### **BACKGROUND:**

The atopic march describes the progression from atopic dermatitis during infancy to asthma and allergic rhinitis in later childhood. In a Canadian birth cohort we investigated whether

concomitant allergic sensitization enhances subsequent development of these allergic diseases at age 3 years.

#### **METHODS:**

Children completed skin prick testing at age 1 year. Children were considered sensitized if they produced a wheal 2 mm or larger than that elicited by the negative control to any of 10 inhalant or food allergens. Children were also assessed for atopic dermatitis by using the diagnostic criteria of the UK Working Party. At age 3 years, children were assessed for asthma, allergic rhinitis, food allergy, and atopic dermatitis. Data from 2311 children were available.

#### **RESULTS:**

Atopic dermatitis without allergic sensitization was not associated with an increased risk of asthma at age 3 years after adjusting for common confounders (relative risk [RR], 0.46; 95% CI, 0.11-1.93). Conversely, atopic dermatitis with allergic sensitization increased the risk of asthma more than 7-fold (RR, 7.04; 95% CI, 4.13-11.99). Atopic dermatitis and allergic sensitization had significant interactions on both the

additive (relative excess risk due to interaction, 5.06; 95% CI, 1.33-11.04) and multiplicative (ratio of RRs, 5.80; 95% CI, 1.20-27.83) scales in association with asthma risk. There was also a positive additive interaction between atopic dermatitis and allergic sensitization in their effects on food allergy risk (relative excess risk due to interaction, 15.11; 95% CI, 4.19-35.36).

# **CONCLUSIONS:**

Atopic dermatitis without concomitant allergic sensitization was not associated with an increased risk of asthma. In combination, atopic dermatitis and allergic sensitization had strong interactive effects on both asthma and food allergy risk at age 3 years.