Clinical predictors of remission and persistence of adult-onset asthma


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Disclosure belangen spreker

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<th>(potentiële) belangenverstrengeling</th>
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<td>Voor bijeenkomst mogelijk relevante relaties met bedrijven</td>
<td>Bedrijfsnamen</td>
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<td>• Sponsoring of onderzoeksgeld</td>
<td>• Novartis (tbv congresbezoek)</td>
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Introduction

• Adult-onset asthma:
  • clinically important
  • relatively understudied asthma phenotype

• Presumed clinical course:
  • chronic with a low remission rate
  • vs childhood-onset asthma: remission up to 65%

Introduction

• Limited number of longitudinal studies:
  • prognosis very poorly understood
  • influencing factors unknown

AIM:
To identify factors associated with persistence and remission of new-onset asthma in adults
Methods

- Patients: adults (> 18 years) with recently diagnosed asthma

- Asthma: doctor’s diagnosis, based on typical symptoms and reversible airflow obstruction

Exclusion:
Self-reported history of:
- Childhood asthma
- Asthma medication in childhood

GINA-guidelines
Methods

Asthma remission
- no asthma symptoms for ≥1 year AND no asthma medication use for ≥1 year.

Analysis:
- Descriptive statistics (t-test and Man-WhitneyU test)
- Logistic regression analysis
Results

170 patients at 5 year FU
27 in remission (16%)

Subjects with persistent asthma:
→ Older
→ Worse asthma control
→ More often Nasal polyps
→ More severe BHR
→ Higher blood neutrophils

Results

Change after 5 years

Persistent asthma:
→ Decrease ACQ
→ Decrease FEV1/FVC
→ Increase sputum neutrophils

Remission:
→ Decrease ACQ
→ Increase in methacholine PC20
Results

Predictors of asthma persistence in multivariable analysis

• Bronchial hyperresponsiveness (lower PC$_{20}^-$ methacholine, Beta(SE)=0.99(0.39), p=0.005)

• Presence of nasal polyps (Beta(SE)=2.96(1.47), p=0.001)
Conclusion

• One in six patients experiences remission

• Risk factors for persistence:
  – moderate to severe bronchial hyperresponsiveness
  – nasal polyposis

• If present: chance of asthma remission to less than 1%

Implications

• Clinical indicators for patients with poor prognosis

• Possible treatable traits

• Evaluation by ENT-specialist for nasal polyposis