How Has Our Management of Foreign Body Aspiration in Children Evolved Over the Last Two Decades? A Recommendation for a Standardized Approach to Safe Foreign Body Removal

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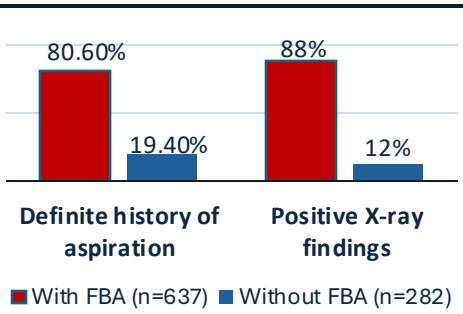
Purpose

- This study demonstrates the evolution of our management of FBA over the past two decades

Methods

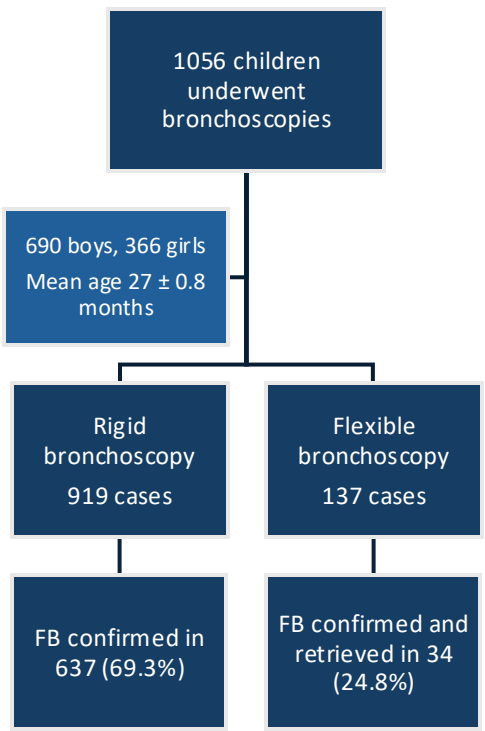
- Retrospective study
- 2004–2024
- Since 2021, diagnostic flexible bronchoscopy has been performed in low-risk cases
- Low-risk cases: patients without reliable aspiration history and/or with negative X-rays



Diagnostic Performance

	Sensitivity	Specificity	Accuracy
History	92%	62%	81%
X-ray	74%	83%	76%
Combined	77%	86%	80%

Results



- Complications: 61 (5.7%) cases
  - bronchospasm (n=54)
  - bradycardia (n = 7)

Since 2017, pre-procedure β_2-agonist + dexamethasone significantly reduced bronchospasm (5.7% → 1.6%, $p<0.05$)

Conclusions

- No specific symptom or sign ensures a definitive diagnosis of FBA
- Bronchoscopy remains indicated when there is a reliable history of aspiration
- *Therefore, a diagnostic flexible biopsy is justified in low-risk patients*
- Pre-procedural β_2-agonist and dexamethasone administration effectively reduces bronchospasm incidence during rigid bronchoscopy