Long-life relationships always bring trouble

A 58-year-old woman, a butcher from her youth and a history of hemoptysis related to respiratory infection at the age of 30, was admitted into Intensive Care Unit for life-threatening hemoptysis and respiratory hypoxemic insufficiency. The bronchoscopy identified bleeding coming from the lower right lobe with an incipient clot. Computerized thoracic tomography revealed ground glass opacities in the middle and lower right lobes, probably indicative of blood filling alveoli. She was extubated 24 h later and continued on antitussive treatment and amoxicillin/clavulanic acid until hemoptysis diminished in the following days. It was assumed that the risk of life-threatening rebleeding was high, so bronchial arterial embolization was performed. The arteriography detected the presence of a fistula connecting right bronchial (Fig. 1A) and pulmonary arteries and it was occluded with bead-block particles of 500–600 μm. The subsequent control demonstrated flow extinction, the fistula was completely blocked (Fig. 1B). A week later, in the absence of hemoptysis, the patient was discharged.

Arterial malformations are commonly found in angiography conducted in hemoptysis. Cases of systemic-pulmonary circulation shunts have been reported within parenchymal lung involvement, mostly due to bronchiectasis or tuberculosis sequelae, and rarely due to hereditary haemorrhagic telangiectasia. We present an elderly woman with a congenital bronchial-pulmonary artery fistula and life-threatening hemoptysis, who was embolized with immediate successful angiographic result. Embolization is seen as a safe and effective treatment for life-threatening hemoptysis, recurrence rates depend on different etiologies. Our patient has a considerable risk of rebleeding, that may lead to repeat embolization or elective surgery in the future.

Conflicts of interest

The authors have no conflicts of interest to declare.

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Figure 1  Description. Angiography preprocedure (A) shows hypertrophy of right bronchial artery and the presence of a fistula between bronchial artery and pulmonary artery. Angiography postprocedure (B) shows the absence of flood to pulmonary artery.
Practice of spirometry among physicians caring for children with asthma in Portugal – The EspiroPed survey

Keywords
Children; Spirometry; Asthma

Introduction

Spirometry is a key component of the asthma management guidelines’ workup for diagnosis, assessment and monitoring of severity and control. However, evidence from practice pattern studies and surveys suggests there is limited use of spirometry in patients of all ages with asthma, for reasons that remain unclear. In Portugal, the National Program for Respiratory Diseases warns that this is also the case for chronic obstructive pulmonary disease.

Our main objective was to evaluate and compare current knowledge and practice of spirometry prescription and interpretation among the four groups of physicians caring for children/adolescents with asthma in Portugal: Paediatricians (Ped), Pulmonologists (Pn), Allergologists (AI) and General Practitioners (GP). Secondary objectives were to identify determinants of spirometry prescription and limitations of use, and to assess the need for a training program.

Methods

Study design

The EspiroPed survey was a cross-sectional electronic survey targeting Ped, Pn, AI and GP who follow asthmatic children/adolescents and work in Portugal. These were current members of their respective scientific societies i.e.: A.M. Mutiozabal a, M.D. Santiañez b, J.I. De Granda Orive a

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Questionnaire

A questionnaire on various topics of spirometry use in asthmatic children/adolescents was developed in Portuguese through informal consensus and with different response formats (multiple choice, 5-point Likert items and categories of frequency of use) (available as a supplementary appendix). We collected anonymized data on physicians’ training and workplace; knowledge of national asthma guidelines and ATS/ERS spirometry recommendations; accessibility to and practices of spirometry prescription. The survey was developed using the SurveyMonkey platform (www.surveymonkey.com) and was pilot tested for acceptability and feasibility.

Implementation

The survey ran for six weeks in 2015 (July-August for Ped/Pn, and October-November for AI/GP) An invitation with an open link was sent to each society’s mailing list. Four reminder e-mails were used to optimize the response rate. Consent was implied by survey completion. The Ethics Committee of Centro Académico de Medicina de Lisboa approved this study.

Statistical analysis

Descriptive analysis, stratified by physician specialty, was performed on fully completed surveys. We compared results between physician specialties using univariable analysis (Chi-square test), considering a significance level of 5%. Statistical Package for the Social Sciences 21.0 (SPSS®, Chicago, USA) was used to perform all tests.