[p] Fundación Unidad de Investigación en Tuberculosis (fuiTB), Barcelona, Spain
[q] Hospital San Agustín de Avilés, Asturias, Spain
[r] Centro de Investigación Biomédica en Red de Epidemiología y Salud Pública (CIBERESP), Madrid, Spain
[s] International Union Against Tuberculosis and Lung Disease (UICTER), París, France

* Corresponding author.
E-mail address: pii_tb_teresa_rodrigo@separ.es (T. Rodrigo).

https://doi.org/10.1016/j.arbr.2021.04.006
1579-2129/ © 2020 SEPAR. Published by Elsevier España, S.L.U. All rights reserved.

Enabling a Community Approach to Respiratory Diseases: The HACER COPD Project☆

Habilitando el Abordaje en la Comunidad de las Enfermedades Respiratorias (HACER) EPOC

To the Editor,

Over the past few decades, frequent changes in recommendations for the diagnosis and treatment of chronic obstructive pulmonary disease (COPD) and the growing number of available treatments have led to clinical scenarios of varying complexity that cannot always be resolved by the current guidelines.[1,2] This situation is particularly acute in the area of primary care (PC), where numerous diseases from different specialist areas are evaluated with limited time and resources. As a result, the PC physician often encounters clinical scenarios not addressed by the current recommendations, complicating the management of COPD patients.[3,4] In response to this situation, the Spanish Society of Pulmonology and Thoracic Surgery (SEPAR) has launched an initiative entitled "Enabling a Community Approach to Respiratory Diseases: the HACER COPD project", as a way to facilitate the management of COPD in this care setting.

The objective of HACER COPD was to design 2 pocket cards that physicians could use for quick reference, containing a simplified therapeutic scheme for stable COPD and the management of exacerbations, with clinical criteria for referral to the respiratory medicine department if necessary. To develop these cards, SEPAR contacted the major PA scientific societies and invited them to a face-to-face meeting. The working group consisted of a representative from each PA society, including the Spanish Society of Family and Community Medicine (semFYC), the Spanish Society of Primary Care Physicians (SEMERGEN), and the Spanish Society of General and Family Physicians (SEMG), the SEPAR COPD area coordinator, and a member of the SEPAR executive committee, who acted as group coordinator. The SEPAR secretary's office took care of technical and administrative needs. The representatives of each society were asked to develop 2 simple algorithms for stable COPD and exacerbations that would be discussed during the meeting, held in Madrid on October 30, 2019 at SEPAR headquarters, with the aim of agreeing on a final version.

The HACER COPD algorithm for the management of stable disease is shown in Fig. 1a. The top of the card addresses diagnosis and the need to meet 3 criteria (exposure, symptoms, and bronchial obstruction). The treatment section of the card contains a reminder of the need for adequate non-pharmacological treatment, including smoking cessation, exercise, and influenza and pneumococcal vaccinations. Pharmacological interventions are represented in the card by a 3-step scale, based on dyspnea and exacerbations as the main therapeutic objectives in the community. The card reminds users that therapeutic adherence, inhalation technique, and the influence of comorbidities on clinical presentation should be taken into account during treatment escalation. The card includes the option of starting with 1 or 2 bronchodilators, depending on the degree of dyspnea. Referral to respiratory medicine is advised if the patient does not achieve stability with the maximum inhaled treatment, due to either exacerbations or dyspnea. Finally, the card includes the modified Medical Research Council scale currently recommended for the assessment of dyspnea[1,2] as a reminder.

The HACER COPD algorithm for the management of exacerbations is shown in Fig. 1b. The clinical approach described for the diagnosis of exacerbation underlines the need to rule out other diseases that may cause increased respiratory symptoms. The algorithm then seeks to determine the potential severity of the exacerbation according to saturation measured using pulse oximetry. The card recommends that patients with exacerbations of acute or chronic respiratory failure should be referred to a hospital. For patients with normal oxygenation, a therapeutic algorithm is established in which underlying inhaled treatment is maintained and intensified with short-acting bronchodilators, administering oral corticosteroids and adding antibiotics if sputum is purulent, with an assessment after 48–72 h. Finally, the card includes a reminder of dosing guidelines for oral corticosteroids and the main antibiotics available in PA.

Schemes for COPD management need to maintain a delicate balance between being exhaustive but complex, or simpler but incomplete. Both approaches have their advantages and disadvantages. HACER COPD is intended to be a simple strategy that strikes a balance between correct treatment in PA and referral of patients to respiratory medicine. This algorithm uses dyspnea as the initial classifier and determinant of bronchodilator therapy in stable disease. Dyspnea is the main reason for COPD patients seeking help; this is the most limiting symptom of the disease and carries implications for prognosis.[5,6] Nevertheless, HACER COPD contains some controversial areas; for example, certain markers such as blood eosinophils and bronchial reversibility have not been included. As a result, the therapeutic escalation schedule is simpler than those currently proposed. Another aspect of the algorithm that might raise questions is the idea of mild exacerbation, which, instead of being defined in detail, has been left to medical judgment. The committee understands that mild exacerbations would be those that respond well to inhalers, without the need for oral steroids or antibiotics, in line with current guidelines.

The aim of this simplified algorithm is to provide practical solutions to the early management of COPD in the PA setting. The variables it uses are easily measurable and listed in an order that is logical and easy to remember. Although COPD is a complex, heterogeneous disease, we believe that this simplified approach complies with current recommendations and, because of its simplicity, will help more COPD patients gain access to the right treatment. Sometimes, less is more.

☆ Please cite this article as: Cabrera López C, Gómez Sáenz JT, Molina París J, Trigueros Carrero JA, López-Campos JL. Habilitando el Abordaje en la Comunidad de las Enfermedades Respiratorias (HACER) EPOC. Arch Bronconeumol. 2021;27:442–444.

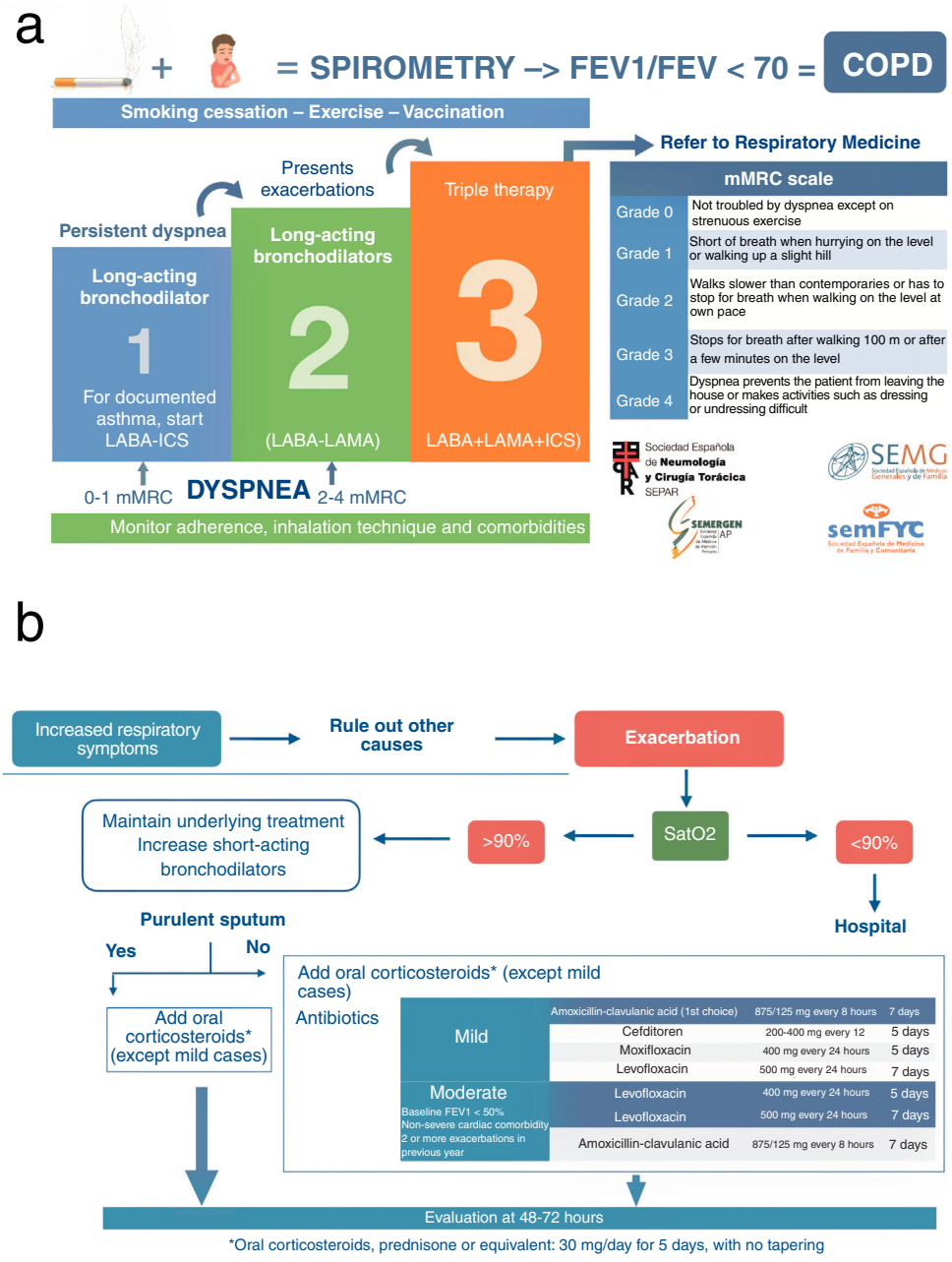

Fig. 1. (a) Treatment algorithm for stable COPD; (b) Treatment algorithm for exacerbations in the outpatient setting.

Funding

This project received an unrestricted grant from GlaxoSmithKline, S.A.

Conflict of Interests

CCL has received honoraria in the past 3 years for lectures, scientific consultancy, and clinical trial participation from (in alphabetical order): AstraZeneca, Boehringer Ingelheim, Chiesi, Esteve, Ferrer, Gebro, GlaxoSmithKline, Menarini, and Novartis.

JTGS has received honoraria in the last 3 years from GSK, BIAL, Pfizer, AstraZeneca, Chiesi, TEVA, and Mylan.

JLLC has received honoraria in the past 3 years for lectures, scientific consultancy, clinical trial participation, and writing of papers from (in alphabetical order): AstraZeneca, Boehringer Ingelheim, Chiesi, CSL Behring, Esteve, Ferrer, Gebro, GlaxoSmithKline, Grifols, Menarini, Novartis, Rovi and Teva.

JMP has received honoraria in the past 3 years for lectures, scientific advice and clinical study participation from AstraZeneca, Boehringer Ingelheim, Chiesi, GlaxoSmithKline, Menarini, Novartis, Pfizer, semFYC, and SERMAS.

JATC has received honoraria in the past 3 years for teaching activities, scientific consultancy, clinical trial participation, and writing of papers for: AstraZeneca, Boehringer Ingelheim, Chiesi, Esteve, Ferrer, GlaxoSmithKline, Menarini, Novartis, Rovi, and Teva.

References

1. Singh D, Agusti A, Anzueto A, Barnes PJ, Bourbeau J, Celli BR, et al. Global strategy for the diagnosis, management, and prevention of chronic obstructive lung disease: the GOLD science committee report 2019. Eur Respir J. 2019;53, pii: 1900164.

2. Miravitlles M, Soler-Cataluna JJ, Calle M, Molina J, Almagro P, Quintano JA, et al. Spanish Guidelines for Management of Chronic Obstructive Pulmonary Disease (GesEPOC) 2017 pharmacological treatment of stable phase. Arch Bronconeumol. 2017;53:324–35.
3. Abad-Arranz M, Moran-Rodriguez A, Mascaros Balaguer E, Quintana Velasco C, Abad Polo L, Nunez Palomo S, et al. Quantification of inaccurate diagnosis of COPD in primary care medicine: an analysis of the COACH clinical audit. Int J Chron Obstruct Pulmon Dis. 2019;14:1187–94.
4. Abad-Arranz M, Moran-Rodriguez A, Mascaros Balaguer E, Quintana Velasco C, Abad Polo L, Nunez Palomo S, et al. Community Assessment of COPD Health Care (COACH) study: a clinical audit on primary care performance variability in COPD care. BMC Med Res Methodol. 2018;18:68.
5. Nishimura K, Izumi T, Tsukino M, Oga T. Dyspnea is a better predictor of 5-year survival than airway obstruction in patients with COPD. Chest. 2002;121:1434–40.
6. Almagro P, Martinez-Camblor P, Soriano JB, Marin JM, Alfageme I, Casanova C, et al. Finding the best thresholds of FEV1 and dyspnea to predict 5-year survival in COPD patients: the COCOMICS study. PLOS ONE. 2014;9:e89866.

Carlos Cabrera López,[a,*] José T. Gómez Sáenz,[b] Jesús Molina París,[c] Juan A. Trigueros Carrero,[d] José Luis López-Campos[e,f]

[a] *Hospital Universitario de Gran Canaria Dr. Negrín, Las Palmas de Gran Canaria, Las Palmas, Spain*
[b] *Centro de Salud de Nájera, Nájera, La Rioja, Spain*
[c] *Centro de Salud Francia, Fuenlabrada, Madrid, Spain*
[d] *Centro de Salud Menasalbas, Menasalbas, Toledo, Spain*
[e] *Unidad Médico-Quirúrgica de Enfermedades Respiratorias, Instituto de Biomedicina de Sevilla (IBiS), Hospital Universitario Virgen del Rocío/Universidad de Sevilla, Sevilla, Spain*
[f] *Centro de Investigación Biomédica en Red de Enfermedades Respiratorias (CIBERES), Instituto de Salud Carlos III, Madrid, Spain*

* Corresponding author.
E-mail address: ccablopn@gmail.com (C. Cabrera López).

https://doi.org/10.1016/j.arbr.2021.04.010
1579-2129/ © 2021 SEPAR. Published by Elsevier España, S.L.U. All rights reserved.

Analysis of the Indications and Complications of Vena Cava Filter in Patients with Venous Thromboembolism☆

Análisis de las indicaciones y complicaciones de los pacientes con enfermedad tromboembólica venosa a los que se ha colocado filtro de vena cava inferior

Venous thromboembolism (VTE) comprises deep vein thrombosis (DVT) and pulmonary thromboembolism (PTE). PTE is the third leading cause of cardiovascular mortality, following stroke and acute myocardial infarction, and has a major socioeconomic impact.[1] Anticoagulation is the treatment of choice in both the acute phase and follow-up of PTE patients, although there are clinical situations in which contraindications prevent its use.[2] When anticoagulant therapy is contraindicated in patients with VTE,[2] for example, vena cava filters (VCF) are indicated. However, evidence supporting the efficacy and safety of VCFs is based on 2 clinical trials[3–5] and a systematic review and meta-analysis showing that VCF placement was associated with a 50% decline in PTE and an increase in DVT of approximately 70%, but had no effect on all-cause mortality or PTE-related mortality.[6]

The scarcity of information in the literature has prompted many authors to conduct studies to analyze the safety and efficacy of VCFs, although insufficient conclusions have been reached to indicate their use with a high level of evidence.[6] For this reason, we aimed to analyze both short-term (major bleeding, recurrence and death at 30 days) and long-term complications in patients treated at our center, and to compare these results with a previously published historical series.[7]

We performed a retrospective, single-center study of consecutive patients with symptomatic acute PTE who underwent VCF placement between January 2015 and August 2019. We analyzed the rate of complications (major bleeding, recurrence, and death) at 30 days, and compared our results with those previously published by Muriel et al.[7] using the Z-test to compare proportions.

During the study period, 65 inferior VCFs were placed in patients with a median age of 62 years, mainly men (63.5%). The most frequent comorbidities were cancer (44.6%), smoking (32.3%), and dyslipidemia (27.7%). The reasons for VCF placement were surgical intervention (53.8%), recent bleeding (38%), and high risk of bleeding (18.5%). The median time from VTE to VCF placement was 14 days. In approximately two-thirds of the patients, the VCF could be withdrawn without incident. At 30 days, there was 1 recurrence (1.5%), 3 severe bleeding events (4.6%), and 5 deaths (7.7%). Median follow-up was 8.77 months. Throughout the follow-up period there were 2 recurrences (3.1%), 5 severe hemorrhages (7.7%), and 15 deaths (23.1%) (Table 1 Supplementary material). There were no statistically significant differences between complications at 30 days in our series and those reported by Muriel et al.[7] (Table 1).

In our series, VCF placement in patients with VTE with a contraindication for anticoagulant therapy was effective and safe, and the complication rate was similar to that of previous publications. The effectiveness of VCFs has always been a source of controversy, and for that reason studies are needed to support their effectiveness and safety. Decousus, in the Prévention du Risque d'Embolie Pulmonaire par Interruption Cave trial (PREPIC[4]) trial, initiated what has become the routine use of VCF in clinical practice, demonstrating its efficacy in the prevention of PTE. The study was an open-label randomized trial of 400 participants with documented DVT or PTE receiving anticoagulation with an 8-year follow-up that demonstrated that permanent VCF placement decreased the incidence of PTE during follow-up. However, one of the reasons why the effectiveness of these devices is still under discussion is that there was no reduction in overall mortality; it should be mentioned, however, that the study series was an elderly population with significant risk factors, such as concomitant cancer and cardiovascular disease. In spite of this, the use of VCF in highly selected patients is supported by the major scientific societies and specified in the main clinical practice guidelines[2] as a strategy for PTE prevention in patients with a contraindication for anticoagulation. It is precisely in this group of highly selected patients with a high risk of bleeding that other studies have tried to analyze the possible disadvantages of VCF by examining short-term complications, and this was the main goal of our study. Muriel et al.[7] showed that although patients treated with VCF had a higher risk of bleeding, major bleeding was not statistically significantly higher than in a control group treated with anticoagulant therapy. These are exactly the findings that we wanted to compare in our analysis, and indeed, we found a complication rate similar to that of Muriel et al.[7] in our study: 30-day mortality was 7.7% and 30-day severe bleeding was 4.6%.

Our study has some limitations: it was performed in a single center and data were collected retrospectively. Even so, the number of VCFs analyzed is high, and a registry is available in our hospital that allows all patients who received a VCF to be analyzed consec-

☆ Please cite this article as: Lopez-Ruz S, Marin Romero S, Elias Hernandez T, Asensio Cruz MI, Barca-Hernando M, Montero Romero E, et al. Análisis de las indicaciones y complicaciones de los pacientes con enfermedad tromboembólica venosa a los que se ha colocado filtro de vena cava inferior. Arch Bronconeumol. 2021;57:444–445.