
Referral Criteria for Asthma and the Pandemic: New Challenges, New Responses

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To the Editor:

Improvement of the coordination of health care is a priority for many health systems, especially in the case of patients with chronic conditions requiring a multidisciplinary intervention, such as bronchial asthma. Our group recently published a consensus document based on the input of 5 scientific societies representing health professionals involved in the care of patients with asthma [1].

The situation resulting from the SARS COV-2 pandemic has affected the care activity of many professionals and made it necessary to review the recommendations made in the previous document [1]. These must now be adapted to the regulations stipulated by public health bodies and various scientific societies on aspects such as additional tests and telemedicine [2,3].

Appropriate coordination between health professionals involved in the management of asthma patients in circumstances as unusual as those arising from the pandemic and the modifications to health care that are made in the long term should not be limited to following standard recommendations. Instead, they should bring together the visions and experiences of professionals who have faced—and continue to face—this situation in their own areas. Encapsulating such a wide variety of recommendations that can be applied at various levels would go some way to improving the care provided to asthma patients, both during the health emergency and after the acute phase.

The pandemic has necessarily led to a rapid advance in the use of telemedicine, which could prove to be a basic tool for the follow-up and education of patients with asthma. However, an appropriate protocol should be followed to ensure that

telemedicine is fully effective, especially if it acts as a channel for providing remote health care, where communication between professionals and patients may be more complex than in a face-to-face interaction. Therefore, it seems reasonable to recommend appropriate training to develop new skills for communicating with patients. Furthermore, since not all patients will benefit equally from this alternative style of care, basic aspects must be considered before generalizing such an approach. Thus, patients must give their consent to participate in an online visit and be mentally able to do so. They must also have access to available channels (mobile phone, tablet, personal computer, apps) and know how to use them. Patients should already be in follow-up with in-person visits that does not require additional examinations or whose additional examinations can be delayed until the next scheduled face-to-face visit. In any case, telephone consultation would not be an appropriate channel if the aforementioned conditions are not met or the diagnosis of asthma has not been confirmed. In the case of patients who do not respond to therapy, remote care may prove very useful for readjusting treatment or redirecting the patient.

Sharing care between specialties requires templates and checklists based on agreed protocols [4] that bring together the clinical history (previous conditions, symptoms, and treatment received), physical examination, and additional testing to facilitate and structure care. In the case of patients who meet the conditions for remote care, the follow-up visit should cover basic clinical data at all levels of the health system (Table). Questioning about symptoms should be structured, and an appropriate instrument such as the Asthma Control Test (ACT)—including exacerbations and current peak expiratory flow—should be administered. In the case of suspected overuse of inhaled short-acting β_2 agonists, the number of containers dispensed at the pharmacy since the previous visit should be counted. Furthermore, it is important to enquire about control of comorbid conditions (eg, rhinitis, gastroesophageal reflux, obesity, sleep apnea), exposure to triggers (especially irritants such as tobacco), and allergens the patient is sensitized to.

Table. Telephone Follow-up: Content

- Assessment of symptom control by clinical survey and validated questionnaire (ACT)
- Exacerbations: number and severity.
- Adherence (TAI, verification of dispensation in the electronic prescription, inhaler technique)
- Comorbid conditions (rhinitis, obesity, sleep apnea, gastroesophageal reflux)
- Triggers and aggravating factors
- Adjusting treatment
- Request for diagnostic tests when considered necessary (eg, complete blood count, spirometry, PEF)
- Scheduling of next remote or face-to-face visit

Abbreviations: ACT, Asthma Control Test; PEF, peak expiratory flow; TAI, Test of Adherence to Inhalers.

Adherence to maintenance therapy and inhalation technique should be evaluated at each visit. The nursing clinic plays a key role in these areas. In the case of telephone visits, the nursing clinic must have the necessary facilities to evaluate and improve adherence and to optimize review of and training in the best inhalation technique. Of particular interest are devices that provide tech-friendly patients with audiovisual tools to facilitate inhalation techniques and apply validated questionnaires such as the Test of Adherence to Inhalers [5], which attempts to determine why adherence is poor. New technologies can also be applied in patient education: the development of apps and other instructive materials make it possible to educate patients without a face-to-face visit. If remote care is to be considered a serious option, then it should include not only telephone calls, but also video calls.

The pandemic has necessitated immediate development of remote consultation involving various professionals caring for a single patient. It is of paramount importance to encourage fluent communication between professionals that is agreed upon by those involved with the aim of optimizing care of the asthma patient and reducing the number of unnecessary face-to-face visits. Such visits include those aimed at administrative processing, requests for additional testing, resolution of doubts about efficacy and adverse effects of medication, and evaluation of diagnostic test results. Face-to-face visits could be particularly useful in the case of uncertain diagnoses, severe asthma, suspected occupational asthma, aspirin-exacerbated respiratory disease, and etiologic diagnosis of allergic asthma [4]. However, the COVID-19 pandemic also changed the routine of providing face-to-face health care services, thus limiting various diagnostic resources for chronic respiratory patients, such as pulmonary function laboratories, which must work with the best quality and safety standards, while simultaneously adding real value to the diagnosis and treatment of the asthmatic patient [6].

In summary, the pandemic has generated new care strategies based on technology that should become a standard tool in our activity and an optimal support. However, in many areas, such an approach requires training to acquire specific skills and adaptation of current protocols. The health professional should play a leading role in the design of new solutions to ensure safe, high-quality consultations.

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Conflicts of Interest

The authors declare that they have no conflicts of interests.

References

1. Blanco Aparicio M, Delgado Romero J, Molina París J, Tomás Gómez J, Gómez Ruiz F, Álvarez Gutiérrez FJ, et al. Referral Criteria for Asthma: Consensus Document. *J Investig Allergol Clin Immunol*. 2019;29(6):422-30.

2. Recomendaciones de prevención de infección por coronavirus en las unidades de función pulmonar de los diferentes ámbitos asistenciales. Available at: <https://www.separ.es/node/1773>.
3. Ministerio de Sanidad. Guía de actuación con los profesionales sanitarios en el caso de exposiciones de riesgo a COVID-19 en el ámbito sanitario. Available at: https://www.mscbs.gob.es/profesionales/saludPublica/ccayes/alertasActual/nCov-China/documentos/Contactos_personal_sanitario_COVID-19.pdf
4. Núñez Palomo S, Álvarez Gutiérrez FJ, Delgado Romero J, Gómez Ruiz F, Hidalgo Requena A. Criterios de derivación de asma: nuevas perspectivas tras la pandemia de covid-19. *Med Gen Fam.* 2020;9(5):264-6.
5. Plaza V, Fernandez-Rodriguez C, Melero C, Cosio BG, Entrenas LM, de Llano LP, et al. Validation of the 'Test of the Adherence to Inhalers' (TAI) for Asthma and COPD Patients. *J Aerosol Med Pulm Drug Deliv.* 2016;29:142-52.
6. Olaguibel JM, Alobid I, Alvarez Puebla M, Crespo-Lessmann A, Domínguez Ortega J, García-Río F, et al. Functional Examination of the Upper and Lower Airways in Asthma and Respiratory Allergic Diseases: Considerations in the Post-SARS-CoV-2 Era. *J Investig Allergol Clin Immunol.* 2021;31(1):17-35.

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