

The asthma virtual visit in the COVID-19 pandemic

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This article advises how to optimize the virtual assessment of a patient with asthma during and following the COVID-19 pandemic. A presentation on this will be available on the website of the Family Physician Airways Group of Canada at www.fpagc.com.

FACTS

- Asthma does not increase the risk of COVID-19
- The risk of death with COVID-19 is related to comorbidities of CV disease, hypertension, diabetes, chronic renal disease and chronic lung disease, but not asthma.
- The best way to prevent COVID-19 respiratory morbidity in asthmatics is to get good asthma control, and practice social distancing.

Single biggest message is to continue or even step up therapy to achieve optimal asthma control. Inhaled corticosteroids (ICS) are safe and do not increase the risk of COVID-related complications

It is helpful to organize the 'visit' into several separate parts:

1. **Assess Likelihood of COVID-19 infection.** A frequently asked question is how to differentiate between asthma and COVID-19 symptoms. Isolated cough with fever and myalgia would indicate illness and during COVID-19 would suggest getting tested and isolating. Typical asthma symptoms during the spring without other signs of illness would lean towards asthma. A Peak Flow meter could be used to assess the severity of the illness and help monitor the asthma.

2. **Measure Asthma Control.** The questions regarding any exercise limitation, recent worsening, frequency of reliever use, daytime and nighttime symptoms should be asked. A formal validated test such as the Asthma Control test¹ can be of value. The Thirty Second test is a fairly simple Canadian created asthma control tool².

Elective spirometry should not be done currently as it is an aerosol generating process. Remember that you will need to do it sometime later if your diagnosis has not been confirmed.

3. **Assess Inhaler Technique.** There are multiple potential devices including MDI (metered dose inhaler), DPI (dry powder inhaler) and SMI (soft mist inhaler). The Lung Association has a website with all the different inhalers with descriptions and videos to help your patients use them correctly (<https://www.lung.ca/lung-health/get-help/how-use-your-inhaler>). If you are doing your visit via video, it is best to watch the patient use their inhaler to assess technique. The use of nebulizers will generate aerosols and as such should not be used unless a patient is living alone. Fortunately, it is clear that other devices deliver medication at least equally efficiently as nebulizers³.

4. **Assess Triggers.** Many patients know about their allergens. Spring is here and with grasses and trees the allergic burden is accumulating. They are spending more times indoors and may have got a pet. Smoking cessation is a goal for all of our patients. The current pandemic may be an opportunity for patients to consider it. While some patients will cite boredom or loneliness as a barrier, others may recognize that being at home removes them from the work stresses and the need for work-breaks that drive some smokers to do so. Reduce the 5A's to 2A's. Ask and Act. Support with pharmacotherapy that could include nicotine replacement, bupropion or varenicline. Air pollution is actually currently better with the decrease in travel, so not all is bad!

5. Review Treatment. Ensure that the patient knows which medication they are to use to control their asthma. The new GINA guidelines⁴ have clearly stated that no patient should receive SABA monotherapy⁵. Anti-inflammatory therapy with ICS, either regularly or 'on demand' with an ICS-formoterol reliever⁶ should be used and therapy stepped up to get control.

There is some concern of a shortage of Salbutamol MDIs. Recognize that other relievers do exist and include terbutaline DPI, formoterol DPI, Salbutamol/Ipratropium SMI and Budesonide/Formoterol DPI. The Canadian Thoracic Society has created a fact sheet about this available along with a fact sheet about Asthma and Covid, both available at <https://cts-sct.ca/covid-19/>.

6. Have an Asthma Action Plan. It will be more difficult than ever for patients to access health care, so early treatment with a self-management plan can be effective. Completion of an action plan can be done using the tool section of the FPAGC with the principle of quadrupling ICS for a worsening being the step up. Use of oral steroids for worsening symptoms can be done as you would do in normal circumstances, but any use of oral steroid necessitates a review to understand why it came to that.

7. Assess Comorbidities. It is important to manage other illnesses that can complicate or worsen the asthma. These include rhinitis, obesity and GERD. PPIs and nasal steroid should be continued or added if necessary. In addition, patient fears and anxiety can also be a factor and using validated tools like the PHQ-2 and GAD-7 might be useful. Remind patients that exercise is good for them, but to continue to practice the appropriate social distancing.

Asthma Diagnosis - confirmed

Symptoms - ACT Control Test

Triggers

Health - mood and co-morbidities such as GERD and rhinitis

Medications - technique and adherence

Action Plan

Thanks for taking care of our patients with chronic respiratory illnesses during this difficult time.

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References

1. Schatz M. Asthma Control Test: reliability, validity, and responsiveness in patients not previously followed by asthma specialists. *J Allergy Clin Immunol*. 2006 Mar;117(3):549-56.
2. Ahmed S. Validation of the 30 Second Asthma Test as a measure of asthma control. *Can Respir J*. 2007 Mar;14(2):105-9.
3. <https://www.lung.ca/lung-health/get-help/how-use-your-inhaler>
4. <https://ginasthma.org>
5. Kaplan A. SABA overuse. *J Lung Pulm Respir Res*. 2019;6(4):101102

6. Kaplan A, Mitchell, P, Cave A, Gagnos R, Foram V, Ellis A, Effective Asthma Management: Is It Time to Let the AIR out of SABA? *J. Clin. Med.* 2020, 9, 921; doi:10.3390/jcm9040921