PULSE Nursing IN PRACTICE

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QUICK GUIDE

Identifying and managing potential severe asthma

The Accelerated Access Collaborative recently published The Consensus Pathway: Management of Uncontrolled Asthma in Adults (https://www.oxfordahsn.org/our-work/asthma-biologics-toolkit/). The pathway has a plethora of pragmatic information and tools and some elements are summarised below.

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What is severe asthma?

Asthma is one of the most common respiratory conditions and affects people of all ages. An estimated 3-5% are diagnosed with severe asthma which is defined as asthma that remains uncontrolled despite adherence with maximal optimised therapy (i.e. high dose inhaled corticosteroid [ICS]and long-acting beta-agonist [LABA]) and treatment of contributing comorbidities.[1] Severe asthma is associated with frequent exacerbations needing recurrent courses of oral corticosteroids (OCS) leading to high levels of morbidity, more days of work, limitation on daily activities, and decreased health-related quality of life.

Asthma control is assessed based on symptoms and exacerbations. Uncontrolled asthma is defined as poor symptom control and/or frequent exacerbations (≥2/year) requiring OCS or serious exacerbations (≥1/year) requiring hospitalisation. It is important to use a validated questionnaire to assess symptoms e.g., asthma control questionnaire (ACQ) or asthma control test (ACT). Patients on all steps of asthma treatment can have uncontrolled asthma.

There are many new treatments available for people with severe asthma and therefore early identification and timely referral to secondary care and/or severe asthma centres (SAC) is important.

The importance of identifying uncontrolled asthma and potential severe asthma

The aim of early identification of patients with potentially severe asthma is to reduce the morbidity and mortality associated with uncontrolled asthma. This includes treatment (OCS) related side effects, hospitalisations, and the impact on quality of life. Importantly, each prescribed course of OCS results in a cumulative burden with side effects starting to develop after as little as a lifetime exposure of four courses of OCS.[2] These side effects include osteoporosis, dyspeptic disorders, sleep disturbance, hypertension, diabetes, cataract, and cardiovascular disease.

Reports suggest that over 70% of adults with potential severe asthma in primary care have not been referred or had a specialist review in the past year and that over 40% of patients were uncontrolled for over two years prior to referral to a SACs.[3,4] This highlights that large numbers of patients with potential severe asthma are under recognised in primary care and more proactive steps need to be taken for early identification, treatment optimisation, and referral if necessary.

Identification and management of uncontrolled and potential severe asthma in primary care

The first step in the management of uncontrolled and potentially severe asthma is early and proactive patient identification. This may involve performing regular patient searches on electronic databases. Steps to consider once patients are identified:

- Confirm diagnosis of asthma – review previous investigations and consider additional investigations (spirometry, peak flow monitoring) and biomarker review (blood eosinophil count and fractional exhaled nitric oxide [FeNO]) as appropriate and available
- Review and improve inhaler technique and treatment adherence
- Once inhaler technique and adherence are optimised, increase or change treatment as per local and national guidance
- Consider and treat relevant comorbidities e.g., reflux and rhinitis
- Support lifestyle modifications e.g., smoking cessation
- Promote regular exercise and activity and a healthy diet
- Ensure patients have an updated written personalised asthma action plan that includes advice on trigger avoidance

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THE HASTE TOOL

H	A	S	T	E
HIGH INTENSITY TREATMENT	**ADHERENCE**	**SEVERE EXACERBATIONS**	**TECHNIQUE**	**EXCLUDE OTHER CONDITIONS**
Is the patient already at the high-end of the treatment escalator?	Are patients taking their medication at the correct dose and frequency?	Has the patient had ≥2 courses of oral corticosteroids or been hospitalised due to asthma in the last 12 months?	Is the patient's inhaler technique correct?	Are conditions that mimic or exacerbate asthma being managed?

When to refer to secondary care or a SAC

If a patient remains uncontrolled despite the above steps, then they should be referred to secondary or specialist care within 6 months of identification of uncontrolled asthma. Patients who are on daily OCS for asthma should be referred directly to a SAC.

The HASTE tool (above) can be used as a reminder of when to refer to secondary care/SAC.

Any referral to a SAC should include:

1. Number of courses of steroids (and antibiotics) and hospital admissions in the last year
2. Details of current medication and adherence (number of prescriptions collected for their inhaled steroid/ combination inhaler and [short-acting beta-agonist] SABA in the last year)
3. Relevant investigations that have been performed and the results
4. Smoking status (vaping, tobacco, and recreational)
5. Relevant comorbidities and treatments initiated

Severe asthma centres

Evidence has shown that systematic assessments and multi-disciplinary team input in a SAC improves asthma control, reduce exacerbations and oral steroid use, regardless of the use of biologics.[5]

Biologic therapies (monoclonal antibodies) are a relatively new class of drugs that target specific pathways that lead to inflammation within the airways.[6] They are licenced for people with severe asthma who are having frequent exacerbations i.e. ≥3 exacerbations per year needing treatment with OCS. They are only initiated in SACs and select secondary care sites. Biologics reduce exacerbations and overall steroid use and improve quality of life. As a result, they have the potential to transform many patients lives.

Patients who respond to biologics are likely to continue them long-term unless they stop responding, develop side effects or contraindications to asthma biologics. They should also continue with their prescribed asthma treatment and not stop their inhalers without discussion with the SAC team. Biologics do not need to be stopped if the patent has an infection or is due surgery and rarely interact with other medications.

Abbreviations

ACQ Asthma control questionnaire
ACT Asthma control test
FeNO Fractional exhaled nitric oxide
ICS Inhaled corticosteroid
LABA Long-acting beta-2 agonist
OCS Oral corticosteroid
SABA Short acting beta-2 agonist
SAC Severe asthma centre

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