PCRS briefing paper

BTS/SIGN British Asthma Guideline update July 2019

Background

The BTS/SIGN asthma guideline is a well-established, comprehensive and respected guideline, which first appeared in 2003, and has undergone regular updates. The guideline methodology has been reviewed by NICE and is accredited as a quality guideline.

The latest update was developed during 2018, and the key changes presented at the BTS winter meeting in 2018. A consultation was undertaken between December 2018 and January 2019, in which PCRS took part. The content of this briefing paper is based on updated BTS/SIGN guideline issued in July 2019.

NICE also published an asthma guideline in December 2017. However, this briefing paper refers almost exclusively to BTS/SIGN guideline except where there is a discrepancy between the two guidelines, and we indicate where we support NICE guidance on specific issues.

Outline of content of BTS/SIGN guideline update

BTS/SIGN are always selective about which sections and chapters of the guideline are reviewed at any point in time, according to changes in the evidence. Due to the pace of change in pharmacological developments, the chapter on pharmacological management is updated most frequently. The key areas that have been updated in 2019 include:

- Diagnosis, monitoring, supported self-management, non-pharmacological interventions, pharmacological management, inhaler devices, management of acute asthma, occupational asthma and provision of information

PCRS response/position

1. PCRS welcome this further update of the long established, comprehensive and highly respected BTS/SIGN guideline for asthma.
2. We are pleased that today BTS/SIGN have announced that future UK-wide guidance for the diagnosis and management of chronic asthma will be jointly produced by BTS, SIGN and NICE, something PCRS has campaigned for (Keeley & Baxter 2018).
3. There are a number of issues where recommendations at a government policy level might have been made, for example, in respect of services that treat tobacco dependency (funding currently under increasing threat) or air pollution. The guideline contains minimal discussion about health inequalities and their impact in asthma though there is a mention that children from low-income families face a moderately increased risk for asthma. We welcome the recommendation that

healthcare policy should target vulnerable groups, ensure equitable access to care and promote reduction in environmental tobacco smoke.

Diagnosis

4. PCRS support the use of objective tests in asthma diagnosis, within the context of a structured clinical assessment, involving examination, full personal and family history and review of patient's clinical records.
5. PCRS believe that greater emphasis should be placed on clinical and physiological re-evaluation over time, which is key to accurate diagnosis, and to the detection of misdiagnosis. We are encouraged that the updated guideline recognises that achieving an accurate diagnosis may take time and may require the comparison of repeated measurements over time including while the patient is asymptomatic as well as when they are symptomatic to detect variation over time.
6. A peak expiratory flow rate (PEFR) monitoring diary is the most immediately available first line objective test and so should be done in all patents old enough to undertake this. We note that evidence is lacking for children's serial peak flow diaries however PCRS still pragmatically supports use of this test depending on the age and ability of the child or young person.
7. Spirometry with reversibility testing is an additional test that can add to the objective evidence that airways obstruction exists and should be performed where available and where this can be done within a reasonable wait time. Anyone with a high probability of asthma from clinical history, exam and PEFR testing should not delay treatment because of no spirometry service or long waits. We welcome the message that spirometry is most helpful for the person with intermediate probability of asthma and this should help inform diagnostic service designers who may be working with more limited resource or have a need to prioritise need for more specialist tests outside standard general practice desktop diagnostics.
8. Whilst PCRS agree with the positioning of spirometry for young people and adults with an intermediate probability of asthma after initial assessment we remain concerned that the performing and interpreting of spirometry is difficult in children, requires significant training and is frequently normal in primary care populations with suspected asthma, so should not be mandatory for asthma diagnosis. In the NICE field-testing pilot study, 70% of those eventually diagnosed with asthma had normal spirometry. We support the use of lower limit of normal for FEV_1/FVC ratio (instead of the fixed ratio of 70%, which may underdiagnose in younger people and over-diagnose obstruction in adults).
9. PCRS agree with the BTS/SIGN positioning of FeNO in diagnosis where there is an intermediate probability of asthma – that it can be useful to establish whether there is eosinophilic inflammation, and provides supporting, but not conclusive, evidence for an asthma diagnosis. A positive test increases the probability of asthma, but a negative test does not exclude asthma.

Monitoring

10. PCRS support the inclusion of a section on predicting and assessing future risk. We would suggest that smoking is responsible for more than a 'slight increase in risk' but that poor collection of smoking status, especially in the secondary care sector impacts on available evidence for the guideline group to refer to.
11. We welcome the recognition of high SABA use as a risk factor for future attacks under 'moderately increased risk' – in adults as well as children. Evaluating SABA use has been a central part of the Asthma Right Care program, a global initiative led by the International Primary Care Respiratory Group (IPCRG), to encourage conversations between HCPs and between HCPs and patients and raise awareness of high SABA use as an identifiable risk factor of increased asthma exacerbation risk.

12. Performing and interpreting spirometry in children is an issue, as the ECCS reference values are not representative of children or the population in general compared to GLI which hasn't been adopted in the UK. Spirometry in children needs careful interpretation and certainly to be considered in line with the history.
13. PCRS agree with the stance BTS/SIGN takes on FeNO testing in the diagnosis of asthma in that testing may be useful for the identification of eosinophilic inflammation of atopy but that the evidence does not support its routine use in adults or children for monitoring purposes.
14. The inclusion of obesity assessment and a focus on weight as well as height in children is welcomed as this is often overlooked as a significant reason for poor control and if attended to in general practice can have far reaching added value in primary and secondary prevention of other conditions.
15. Whilst the guideline suggests caution when using blood eosinophils as part of monitoring it is welcomed that a consensus on control/non control levels have been provided for both adults and children

Supported self-management

15. PCRS welcome the recommendation to quadruple the dose of inhaled steroid for up to 14 days to reduce the need for oral steroids to abort an asthma attack in recognition of the growing evidence that this intervention can be helpful. However, we believe non-specialist clinicians may be cautious about this level of steroid use and would encourage BTS/SIGN to frame this in the context of how it compares to oral steroid doses in any future updates to provide reassurance on safety. One way of putting this recommendation into practice is the recent recommendation for the provision of emergency pMDI and spacer packs for the immediate initial self-management of exacerbations (Keeley & Partridge 2019), a recommendation which PCRS endorses and which we believe should be considered for endorsement by BTS/SIGN.
16. PCRS agree that healthcare staff need to be trained in supporting patients in self managing, and that there are HCPs managing asthma who don't have such training, either in conducting regular reviews or in supporting self-management specifically. We welcome the inclusion of guidance for commissioners on the importance of providing appropriate adequate training for staff delivering care.
17. We welcome the adoption of UK Inhaler Group standard that no inhaler should be prescribed without the person being taught how to use it.

Non-pharmacological interventions

18. The guideline does not specifically mention the role of VBA (very brief advice) to trigger a quit attempt from healthcare professionals in all settings or pharmacotherapy-supported behavioural interventions to treat tobacco dependency. These interventions are highly cost-effective and should be a core element of an asthma treatment plan. Local authority funding for treating tobacco dependency has been reduced or scrapped in many areas and BTS/SIGN has traditionally been fairly low key about treating tobacco dependency and we believe this needs to be rectified with more of a focus placed on the responsibility of the asthma health professional to deliver this essential component even when services are not available. There is a greater emphasis on the need to treat tobacco dependence in this update which we welcome. We note the appropriate concern about environmental tobacco smoke exposure especially in children but would suggest that pre-adolescent children actively smoking is somewhat overlooked. It is disappointing that the new update continues in most part to consider the "advise" element of VBA to be a discussion about communicating harms rather than a discussion about what help is available. This deviates from the proven VBA methodology that assumes people already know

what the harms are and that what they want and need is a hopeful and positive statement about how their asthma health professional can help.

Pharmacological management

19. PCRS support the prescribing of inhalers by brand name to ensure that the patient receives the inhaler the prescriber intended and which the patient is familiar with.
20. PCRS welcome the emphasis on the assessment of increased risk for future asthma attacks in the updated guideline and the inclusion of a history of previous asthma attacks, poor current control and overuse of reliever medication as highlighted by the Asthma Right Care initiative from the IPCRG. However, we continue to find BTS/SIGN cautious in its recommendations about an appropriate number of SABA inhalers a year. Given the recommended frequency of SABA use (stated in this guide as no more than twice per week) , the concerns regarding excessive SABA use as a marker of poor control and the identification of the use of 12 SABA inhalers per year as a marker of those who had such severe asthma that they died by the National Review of Asthma Deaths in 2018, we would support a threshold lower than 12 as a marker of poor control and suggest that patients using >6 inhalers per year should be regarded as being at increased risk for asthma exacerbation.
21. PCRS are currently considering our position on MART regimens.
22. It is now 3 months since the Global Initiative for Asthma (GINA) guidelines were published. The updated GINA guideline included a recommendation that for patients with symptoms less than twice a month and no risk factors for asthma exacerbation, low dose combination ICS-formoterol (also being described elsewhere as anti-inflammatory with reliever - AIR) may be taken as needed for relief of symptoms and if needed before exercise. It would be a useful step for BTS-SIGN or the new BTS/SIGN/NICE collaboration to consider their position on this alternative strategy which recognises the well understood reality of asthma self-management where patients only use medication when they are symptomatic.
23. PCRS supports the value-based approach which NICE takes to deciding on the first line add-on to ICS. NICE recommends the use of LTRA in this context, since the marginal superiority of LABA is outweighed by its greater cost. PCRS therefore advise following NICE's recommendation to use LTRA as first line add on, rather than BTS/SIGN's recommendation of LABA. However, the decision for individual patients should be made between clinician and patient, since both are options. We look forward to the combined BTS/SIGN/NICE asthma pathway and expect this issue to be addressed.
24. Of some concern is the presentation of recommended inhaled medications for children. The guideline categorises medication into 'very low dose' 'low dose' and 'medium dose'. This approach means that, the 'medium dose' could potentially be misinterpreted by an HCP as this 'medium dose' would actually be considered to be a high dose for a paediatric population.

Inhaler devices

25. We welcome BTS/SIGN's continued recognition of the important role of spacers in helping to deliver medication to the lungs when used with an MDI has been underplayed in guidelines and needs strengthening. Spacers can help to overcome the difficulties associated with inhaler technique with MDIs.
26. PCRS support the practice of inhaler choice being down to the clinician and individual patient.
27. The current draft BTS/SIGN guideline has introduced a statement about the global warming potential (GWP) of fluorinated gas propellants (HFCs) which are contained in MDIs and suggest that inhalers with low GWP should be used when they are likely to be equally effective. PCRS supports measures to reduce potential harm to the environment from inhaler use. However, we

warn against any 'blanket switching' from MDIs to DPIs and encourage any decisions about inhaler choice to be made on an individual basis between clinicians and patients. PCRS would also emphasise the importance of MDIs continuing to be available, because of the important role they play in preventing exacerbations, when used with spacers.

28. PCRS would prefer to see a broader statement about how to reduce the overall GWP contribution of asthma treatments. This would cover a variety of issues: better education and adherence with preventer use in asthma; routine spacer use if using MDIs; minimising propellant per dose where the change is acceptable to patients; recycling schemes for inhaler devices (current recommendation is for patients to be encouraged to ask at their pharmacy if they can recycle their used inhalers); switching from pMDI to DPI where the change is clinically appropriate, safe and acceptable. A multifaceted approach of this kind is more likely to be effective in reducing propellant use. It should also be mentioned that alternative low GWP propellants for MDIs are under development. (Parliamentary Environmental Audit committee. UK progress on reducing F-gas emissions. 2018)

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