A cure for asthma
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Currently there is no cure for asthma. Large research collaboratives like the Refractory Asthma Stratification Programme-UK and European Unbiased Biomarkers in Prediction of Respiratory Outcomes (U-BIOPRED) are keeping it on their agenda. However, the current treatment is affordable and works well. Despite this, we have good evidence from almost every country that patients do not necessarily adhere to treatment.1

Does it matter that patients do not take asthma treatments?

Well, it does. Asthma is a treatable disease with a peak onset at a young age. The findings of the recent Royal College of Physician’s inquiry into asthma deaths are tragic.2 Asthma still kills! Asthma killed 195 people in the UK in 2015 and at least half of these death were considered preventable. Particularly chilling are the findings that most children/youths who died of asthma were diagnosed with ‘mild or moderate’ asthma until they died.2 In 2012 there were eight deaths under the age of 45 in New Zealand due to asthma, with a total of 63 deaths throughout all age groups.1

Low-dose inhaled corticosteroids and as required salbutamol—it is that easy!

It’s that easy in most instances. This statement from the NZ Adult Asthma Quick Reference Guide is based on strong evidence.4 In this time of ‘super-sizing’, it is refreshing that this Reference Guide is reframing our thinking and making sure that the standard dose for the treatment of asthma should be a dose of inhaled corticosteroid (ICS) equivalent to beclomethasone 400–500mcg/day; 80–90% of the benefit of ICS can be achieved with the above dose.

Every patient who is using salbutamol more than twice a week is probably better off with regular inhaled corticosteroids. There is strong evidence of benefit for patients with fewer asthma symptoms.5 Certainly, an episode of asthma exacerbation needing oral steroids is an indication for regular ICS therapy.

If low dose steroids don’t work, should I increase the dose?

Yes, sometimes—however, it is here where we can probably have the biggest impact. The Reference Guide is helpful with links to the appropriate evidence, useful practice points and tables relevant for the New Zealand population. Given our propensity to prescribe Salbutamol, not everybody with a ‘blue inhaler’ has asthma. PHARMAC data show that we are prescribing one million salbutamol inhalers for a population of four million each year.6 The Reference Guide gives a useful list of features which makes the diagnosis of asthma more likely. This includes symptoms such as wheeze, breathlessness, chest tightness and cough. The guide also has the features that make asthma diagnosis less likely. This would include features such as lack of airways, reversibility or no response to a trial of treatment. In this situation, low dose inhaled corticosteroids may not work because the patient may not have asthma. In that case, an increase in inhaled corticosteroids would not work.

Patients may well have asthma, however, they may be using inhaled corticosteroids incorrectly or not at all. A recent review suggests that we have made little progress over the last 40 years in educating patients regarding inhaler techniques.7 Poor inhaler usage is a common reason for ‘poorly controlled’ asthma and increasing steroids will not help. It is here that we can make the biggest gain and the Reference Guide devotes a page to it based on the Global Initiative for Asthma.8 It is here,
as health care providers, where we can add real value by building therapeutic relationship with patients and whānau, while explaining the differences between symptom control, future risk and adjust therapy to the patient needs.

Can we identify who is at risk of severe asthma exacerbation and/or mortality?

Yes we can, and this has not really changed much over the years. A table in the guidelines list all the normal culprits like beta-agonist overuse, repeated courses of steroids, previous ICU admissions and comorbidities like major psychological illnesses, which the UK audit also identifies. The reference still lists Māori and Pacific ethnicity as a risk factor for adverse asthma outcome which is supported by New Zealand data, which identifies an increased burden of disease. The Reference Guide devotes a page with practical hints including an audit of our practice. Why is it that a population with a higher burden of disease, who have more hospital admissions and more asthma-related deaths receive less adequate education, fewer written asthma management plans and have fewer prescriptions of inhaled corticosteroids?

Does the Reference Guide provide practical help?

Yes, the quick reference guide has pre-formatted management plans, which can be printed in colour. All we need to do is to complete the patient specific details and drug doses. In the old days, one could imagine these action plans and flow charts on the office wall or the emergency department—in this modern area, it is up to us to show this in local Health Pathways or guidelines.

Will this Asthma Quick Reference Guide make a difference?

No, it won’t make a difference unless we actually use them. We are lucky to be practising at a time where we have treatments available to manage asthma successfully. We are working at a time where health providers work together and join forces to manage asthma. This reference guide is based on compelling evidence, written clearly and adjusted to the New Zealand population.

However, none of this will make any difference if we do not apply this evidence to our practice, assess the adherence to low dose ICS and spend the time to up-skill ourselves. Will 2017 bring another year of high asthma mortality? Will the next census again show Māori and Pacific Islanders with an increased burden of this treatable disease?

Competing interests:
Lutz Beckert has been on the advisory board for AstraZeneca, Boehringer Ingelheim and GlaxoSmithKline and has provided independent medical education at symposia founded by AstraZeneca, Boehringer Ingelheim and GlaxoSmithKline.

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