7 Asthma

Asthma is very common. It is seen in both children and adults and may have an allergic component, particularly in younger patients. The basis of conventional treatment is with drugs, although patients may also be given advice about exercise and breathing.

There is an increasing tendency to treat asthma ‘aggressively’ – that is, to start treatment earlier, for milder cases, and to use corticosteroid inhalers at the beginning of treatment rather than waiting to see the effect of bronchodilators. Other diseases with wheezing, such as chronic bronchitis and emphysema, are also sometimes treated with these drugs but with limited results. Although inhaled drugs cause less general side-effects than if they were taken orally, their effect on the lung tends to be more insidious and, of course, still suppressive.

The first-line treatment of asthma and wheezing is with a bronchodilator, of which there are several types available. These drugs stimulate the lungs and heart and, over time, lead to weakness of these organs. Therefore, the longer patients have taken these drugs, the more likely there is to be chronic damage. In fact, bronchodilators in the past, such as ephedrine and adrenaline (epinephrine), have led to deaths. There is currently some belief, even in orthodox circles, that increasing asthma deaths now may be linked to these agents, particularly fenoterol. In 1990, fenoterol was withdrawn from the market in New Zealand and Australia. A recent survey [1] reported that the risk of death in asthma was significantly greater in those who have received more than one prescription for bronchodilators in the previous 12 months. This suggests, as have previous studies, that increased use of bronchodilators leads to more problems for people because of their effect on cardiac and lung function.

Treatment (mildest to strongest)	**Strength level**
Sodium cromoglycate (sodium cromoglicate)	2
Bronchodilators inhaled nebulised oral	2
Corticosteroid (see Chapter 6 – Arthritis) inhaled oral injected	3

Table 7.1: Drug treatment of asthma

[1] Thorax 2002; 57: 683–686.

Sodium cromoglycate and related drugs

Sodium cromoglycate (sodium cromoglicate) is used to prevent attacks in allergic asthma, although it is not understood how it works and some people who would be expected to respond do not. It is taken regularly. It is not considered to be effective in an acute attack. My experience is that some people gain relief from wheezing by taking a dose of sodium cromoglycate at the time of the attack. It would therefore seem to have similar energetic effects to the bronchodilators.

Generic name	Brand name	Dosage
nedocromil	Tilade	Inhaler – 2 puffs 4 times daily
sodium cromoglycate (sodium cromoglicate)	Aerocrom*, Cromogen, Intal	Inhaler – 2 puffs 4 times daily

Table 7.2: Sodium cromoglycate (sodium cromoglicate) and related drugs

Uses: asthma

Effects

Respiratory: throat irritation, cough, wheezing

Strength level: 2

Beta-adrenoceptor stimulants

Beta-adrenoceptor stimulants are a commonly prescribed group of drugs that relieve wheezing in asthma. They stimulate receptors in the lung that are affected by adrenaline (epinephrine)-like substances. This explains the common side-effects of agitation, restlessness, rapid pulse and tremor.

They may also be given to patients with chronic lung disease, such as chronic bronchitis or emphysema, with limited success. They are usually given in inhaled form, although some are available orally. In more severe cases, they may be applied by nebuliser. They are frequently given together with corticosteroids, usually in inhaled form, but occasionally orally.

Generic name	Brand name	Dosage
bambuterol	Bambec	10–20 mg daily
eformoterol (formoterol))	Foradil, Oxis	1–2 puffs once or twice daily
ephedrine[2]	–	Adults: 15–60 mg 3 times daily
fenoterol	Berotec, Duovent*	1–2 puffs 1–3 times daily Children aged 6–12: 1 puff 1–3 times daily
orciprenaline	Alupent	1–2 puffs every 30 minutes if necessary (maximum of 12 puffs daily)
pirbuterol	Maxair	2 puffs 3–4 times daily (maximum of 12 puffs daily)
reproterol	Bronchodil	1–2 puffs 3 times daily Children aged 6–12: 1 puff 3 times daily
salbutamol (albuterol)	Aerocrom*, Aerolin, Airomir, Asmasal Clickhaler, Asmaven, Combivent*, Maxivent, Proventil, Salamol, Salbulin, Ventide*, Ventodisks, Ventolin, Volmax	Inhaler: 1–2 puffs 3–4 times daily Orally: 4 mg 3 times daily
salmeterol	Serotide*, Serevent	2–4 puffs twice daily Children over 4 years: 1 puff twice daily
terbutaline	Bricanyl, Monovent	Inhaler: 1–2 puffs 3–4 times daily Orally: 2.5–5 mg 3 times daily
tulobuterol	Respacal	2 mg twice or 3 times daily

Table 7.3: Beta-adrenoceptor stimulants

Uses: asthma

[2] Ephedrine is a less selective stimulant of the lungs and commonly causes strong symptoms of palpitations and increased heart rate. It is no longer used commonly in the treatment of asthma.

Cautions: hyperthyroidism, heart failure, angina, palpitations, hypertension, diabetes mellitus, kidney disease (over 50% of the drug is excreted by the kidney).

Care should also be exercised if taken with drugs that are stimulating in nature, such as monoamine oxidase inhibitor antidepressants, tricyclic antidepressants or sympathomimetic agents.

These drugs prolong pregnancy and slow down labour.

Effects

General: weakness, collapse

Cardiovascular: palpitations, low blood pressure, hot extremities, flushing, rapid heart rate

Respiratory: oedema of face and upper body, wheezing

Gastrointestinal: dry mouth, cough, mouth and throat irritation, stomach upset

Urogenital: difficult urination

Musculoskeletal: muscle cramps

Central nervous system: tremor, headache, dizziness

Psychological: hyperactivity in children, anxiety, sleep and behavioural disturbances in children

Blood: low serum potassium levels

Skin: nettle rash

Strength level: 2 (3 if used in severe, life-threatening attacks of asthma where there is the use of several bronchodilator medications as well as corticosteroids)

Theophylline and its relatives

Theophylline is used to relieve wheezing, although there are increased side-effects when it is given together with beta-adrenoceptor stimulants (see above).

Generic name	Brand name	Dosage
aminophylline	Aminophylline, Clonofilin SR, Pecram, Phyllocontin Continus	100–300 mg 3–4 times daily
theophylline	Lasma, Nuelin, Nuelin SA, Quibron*, Quibron-T, Slo-Phyllin, Theo-Dur, Theolate*, Uniphyllin Continus, Zepholin	Depends upon the exact preparation

Table 7.4: Theophylline and its relatives

Uses: asthma

When not to be used: porphyria

Cautions: low blood pressure, heart disease, kidney disease, hyperthyroidism, stomach and duodenal ulceration, liver impairment, epilepsy, the elderly, fever

Effects

Cardiovascular: palpitations, rapid heart rate

Gastrointestinal: nausea, vomiting, poor appetite

Musculoskeletal: cramps

Central nervous system: convulsions, headache

Psychological: insomnia

Strength level: 2 (3 if used in severe, life-threatening attacks of asthma where there is the use of several bronchodilator medications as well as corticosteroids)

Anticholinergic drugs (inhaled)

Anticholinergic drugs also relieve wheezing but are generally given to people who are already taking beta-adrenoceptor stimulants (see above).

Generic name	Brand name	Dosage
ipratropium bromide	Atrovent, Combivent*, Duovent*	1–2 puffs 3–4 times daily.
oxitropium	Oxivent	200 mcg 2–3 times daily

Table 7.5: Anticholinergic drugs (inhaled)

Uses: nasal conditions, asthma

Cautions: glaucoma, enlarged prostate, fever, hot weather

Effects

Gastrointestinal: dry mouth, constipation

Urogenital: retention of urine

Strength level: 2 (3 if used in severe, life-threatening attacks of asthma where there is the use of several bronchodilator medications as well as corticosteroids)

Holistic management of asthma medication

It may be difficult to make an energetic diagnosis, because the clinical picture changes so much with the medication. The emphasis should be to try to wean patients onto less powerful agents as treatment progresses. Accordingly, holistic treatment will be antidoted less and the clinical picture will become clearer.

Any corticosteroid should be withdrawn slowly, because of its powerful suppressive action and the release of symptoms that may occur when it is reduced in dosage. If the patient is taking oral forms (e.g. prednisolone), this should not be reduced by more than 1 mg each month. If the patient is taking 7 mg per day, which is quite a high dose, it may take up to a year to withdraw it. It is quite in order for people to take more of their bronchodilator (within the limitations of the maximum dose) whilst this is happening, because it will have less of a suppressant effect and will be less likely to antidote your treatment. If working with the prescribing doctor, try to substitute an inhaled form for the oral whenever possible.

Next, the inhaled corticosteroid should be reduced. This should be done, if possible, by the prescription of a weaker strength inhaler. When the steroid has been stopped, you can turn to prophylactic drugs such as sodium cromoglycate (sodium cromoglicate). Reduce these slowly also, since there may well be a release of suppressed symptoms. The problems here will be less than with the steroids. If there is no suggestion of allergic disease, and some patients notice no, or very little, benefit from sodium cromoglycate (sodium cromoglicate) and the like, it can be stopped at the very beginning of drug management.

Finally, the use of the bronchodilator should be addressed. I always encourage people to use it only when necessary and after trying to deal with the wheezing situation in some other way (e.g. by rest or relaxation). There is no harm in allowing a wheeze to subside on its own. Patients can take their bronchodilator if the wheezing is severe, with other symptoms such as breathlessness.

It is imperative to be aware of the symptoms of a severe attack of asthma, as this necessitates urgent treatment. Patients may need to receive conventional drug treatment to tide them over such a crisis or

receive regular treatment and monitoring by holistic practitioners. I have treated severe asthma attacks myself with acupuncture with great effect. However, people should be seen frequently and regularly (at least once daily) and closely monitored. Symptoms of concern are *breathlessness* that is:

- severe
- acute in onset
- progressive
- paroxysmal attacks occurring at night

or if accompanied by:

- confusion;
- cyanosis;
- a pulse rate of > 120 per minute; and

Case history

A boy aged 10 years came for treatment. He had had asthma for the previous five years. He had a cough, a runny nose, sneezing and a nasal discharge. Colds always descended onto the chest. He had had six prescriptions of antibiotics each year for the previous five years. His appetite was poor and he preferred sweet food.

Medication

Ventolin inhaler: 2 puffs four times daily

Beclazone inhaler: 2 puffs four times daily

Flixonase nasal spray: 2 sprays twice daily

Pulse: floating Lung, Kidney Yin thin

Tongue: pale body with red spots at front, white sticky coat at root to front

Diagnosis: Lung Qi Deficiency, Kidney deficiency, Damp Accumulation

Treatment principles: tonify Lung Qi, tonify Kidney, resolve Damp

Drug	Type	Uses	Strength level
Ventolin inhaler	Bronchodilator inhaler	Asthma	2
Beclazone inhaler	Corticosteroid inhaler	Asthma	3
Flixonase nasal spray	Corticosteroid nasal spray	Hay fever, persistent symptoms of runny nose, sneezing	3

The table above presents an analysis of his prescribed drugs. Here we have a common situation in the drug treatment of asthma: a combination of a bronchodilator and a corticosteroid. More severe cases may also be given oral corticosteroids. It is important to address the corticosteroids first, as these interfere with the case the most. The patient can use the bronchodilator inhaler as support during the withdrawal process.

Chinese herbal medicine

I treated the patient with Chinese herbal medicine and used a variation of Rehmannia 6 (*Liu Wei Di Huang Wan*) with the addition of Mai Men Dong *Tuber Ophiopogonis Japonici* and Wu Wei Zi *Fructus Schisandrae Chinensis* (*Mai Wei Di Huang Wan*).

Shu Di Huang *Radix Rehmanniae Glutinosae Conquitae* 24 g

Shan Yao *Radix Dioscoreae Oppositae* 12 g

Shan Zhu Yu *Fructus Corni Officinalis* 12 g

Mu Dan Pi *Cortex Moutan Radicis* 9 g

Fu Ling *Sclerotium Poriae Cocos* 9 g

Ze Xie *Rhizoma Alismatis Plantago-aquaticae* 6 g

Mai Men Dong *Tuber Ophiopogonis Japonici* 6 g

Wu Wei Zi *Fructus Schisandrae Chinensis* 3 g

Outcome

At his second visit, one month later, his chest was very good, his nose had improved, as had his appetite. At visit three, one month later, he was now down to 1 puff twice daily of the Ventolin inhaler and 1 puff twice daily of the Beclazone inhaler. He only used his Flixonase when his nose was troublesome.

At his fourth visit one month later, he had no symptoms except a tendency to eat sweet food. He continued to improve over the succeeding months. He gradually reduced his Beclazone inhaler every couple of weeks by 1 puff each time. He only took his Ventolin inhaler when he needed it for his chest symptoms. He had one flare-up of tight chest and wheezing with some phlegm when he finally stopped his Beclazone, but this settled quickly over a few days. For that time he needed to take his Ventolin inhaler twice daily. After nine months of treatment, he was well with no symptoms and needed no inhalers. He remains well some five years later.