# Alternative therapies for asthma: are patients at risk?

# Edzard Ernst and Paul Posadzki

ABSTRACT – Asthma patients often try some form of alternative medicine. This article questions whether this is good or bad. Systematic reviews fail to demonstrate that the treatments in question are demonstrably effective. Other data raise considerable concern over the safety of some forms of alternative medicine. Thus the risk-benefit balance fails to be positive. Patients are often mislead to believe otherwise and physicians should inform their asthma patients responsibly about the value of alternative medicine.

# KEY WORDS: Asthma, alternative therapies, risk, safety

A large body of evidence suggests that many asthma patients use some form of alternative medicine. The precise prevalence rates vary from country to country and depend, of course, on which treatments are included under the umbrella-term of 'alternative medicine', but recent surveys of asthma patients have generated prevalence figures ranging from 4% to 79%.<sup>1–7</sup> The prevalence of alternative medicine usage by paediatric asthma patients is less well researched but also seems to be high.<sup>5</sup>

Asthma patients who use alternative therapies often experience symptom reduction and less anxiety.<sup>4</sup> They tend to use alternative therapies alongside conventional treatments and there is evidence to suggest that the use of alternative medicine does not affect adherence to conventional asthma treatments.<sup>8</sup> The following alternative treatments seem to be particularly popular with asthma patients, but regional and other differences might exist:

- acupuncture<sup>6,9,10</sup>
- aromatherapy<sup>1</sup>
- autologus blood therapy<sup>9</sup>
- bioresonance<sup>9</sup>
- breathing techniques<sup>1,6</sup>
- cupping<sup>11</sup>
- herbal medicine<sup>4,6,9,12</sup>
- homeopathy<sup>4,6,9,10</sup>
- prayer<sup>13</sup>
- reflexology<sup>1</sup>
- relaxation techniques<sup>4</sup>
- vitamin supplements<sup>1,10</sup>
- yoga.<sup>1</sup>

Some of these interventions are self-administered, whereas others require consultations with alternative practitioners.<sup>1</sup>

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Table 1. Systematic reviews of selected alternative therapies for asthma				
Therapy (reference)	n	Conclusions (quotes)		
Acupuncture <sup>26</sup>	11	'there is not enough evidence'		
Breathing techniques <sup>27</sup>	5	'promising but insufficient evidence'		
Chiropractic <sup>24</sup>	3	'spinal manipulation is not an effective treatment for asthma.'		
Herbal medicine <sup>28</sup>	17	'some promising but not fully convincing evidence'		
Homeopathy <sup>29</sup>	6	'not enough evidence'		
Relaxation techniques <sup>30</sup>	9	'for no approach was the evidence conclusively positive'		
n = number of studies include	ed.			

There is evidence to suggest that the communication regarding alternative medicine between asthma patients and their conventional healthcare practitioners is often insufficient; many doctors fail to ask about alternative therapy usage and patients often are reluctant to volunteer this information.<sup>14</sup>

# Potential for benefit

Generally speaking, the evidence supporting the effectiveness of alternative asthma therapies is less than convincing. A recent overview stated that 'there is no strong evidence for effectiveness for any of these modalites.' This may well be true, but more differentiated judgements might be more helpful. Table 1 summarises the conclusions from systematic reviews of various alternative therapies as a symptomatic treatments for asthma. This evidence fails to suggest that treatments other than breathing techniques are effective.

#### Potential for harm

Considering the uncertain benefits of alternative therapies, their risks are important for determining their risk-benefit balance. In general, the risks of the above-named treatments are both under-investigated and under-reported. In most areas of alternative medicine, no adverse-event reporting schemes exist. Moreover, reporting of harm tends to be inadequate for clinical trials that test the efficacy of alternative asthma therapies. The main direct adverse effects of alternative therapies are likely to be similar, regardless of the patient's diagnosis (Table 2). A potentially important but not thoroughly investigated area is that fact that herbal and other supplements can

Table 2. Direct risks of alternative therapies				
Therapy	Direct	Severity	Frequency*	
Acupuncture	Injury of internal organs (e.g. pneumothorax), infection	Potentially life-threatening	Rare	
Aromatherapy	Allergy to essential oil	Mild to severe	NDA	
Autologous blood therapy	Infection	Severe	Rare	
Bioresonance	None known	NDA	NDA	
Breathing techniques	None known	NDA	NDA	
Cupping	Superficial skin damage, infection	Minor	Rare	
Herbal medicine	Depends on the type of herbal medicine but can include hepatotoxicity, herb–drug interactions etc.	Potentially life-threatening	Depends on the type of herbal medicine	
Homeopathy	Contamination or adulteration of remedy	Mild to severe	NDA	
Prayer	None	NDA	NDA	
Relaxation techniques	None	NDA	NDA	
Vitamin supplements	Hypervitaminoses	Mild to severe	Rare	

interact with prescription drugs and thus cause adverse effects in asthma patients.  $^{18}$ 

Another important yet often neglected safety issue is that of indirect harm. If an alternative therapy that is unproven or disproven is promoted as a treatment for asthma, some patients might use it as a replacement for conventional treatment. This will result in poor clinical outcomes or, in extreme cases, deaths.

Unfortunately many alternative medicine enthusiasts fail to realise this problem, and there are many examples of unjustified claims being made, especially on the internet. In 2001, we surveyed 66 UK professional organisations of alternative practitioners. Our findings indicated that aromatherapists, Bowen therapists, chiropractors, homeopaths, magnet therapists, massage therapists and reflexologists all felt confident that they could treat asthma effectively. More recently, surveys of alternative practitioners or their websites suggested that 'only a small proportion of decisions [made by these therapists] were based on evidence from clinical trials'. <sup>20,21</sup>

Chiropractic care for asthma has been relatively well researched.<sup>22</sup> In 2003, we conducted a survey of 350 UK chiropractors to determine whether they would advise an asthma patient to try chiropractic treatment.<sup>23</sup> The results indicated that the majority of them would recommend chiropractic treatment for asthma, despite the fact that there is evidence showing that this approach is not effective.<sup>24</sup> The fact that doctors are often unaware of their asthma patients' use of alternative medicine would seem to increase the risk of harm.<sup>25</sup>

#### Conclusions

Many asthma patients are being misled by spurious claims and thus try some form of alternative treatment. The evidence that these interventions are effective is by-and-large not convincing or even negative. Some alternative therapies are associated with significant risks. Therefore, the risk-benefit balance of these approaches is not positive. Healthcare professionals should be aware of these facts and advise their patients accordingly.

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