



# Complementary Medicine: What You Should Know

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Complementary medicine is controversial, yet the number of patients who use alternative approaches continues to increase.

Physicians are concerned that patients using alternatives may delay seeking treatments that can be life saving. Some worry that patients may be spending time and considerable money for approaches that are not effective, and may be harmful. There is often no scientific basis for many complementary medicine approaches, and there is a lack of regulation and proper training of some alternative practitioners.

Many patients tend not to tell their doctors they are taking alternatives (Table 1).

There are hundreds of different health practices. Even though there is a paucity of double-blind, randomly assigned, controlled trials available, some complementary modalities that are relatively safe are being used by physicians, and have support in the scientific literature.

## What is acupuncture?

Acupuncture has been around for over 2,000 years and has been integrated into many pain clinics and physiotherapy departments. Fine needles of varying lengths and diameters are inserted through the skin along energy pathways or meridians. Situated along these lines are 800 points where the meridians come to the body surface. It is on these points that therapeutic procedures, like acupuncture, moxibustion, shiatsu, and transcutaneous electrical nerve stimulation (TENS) are performed.

## John's herbal dilemma

John, 67, had a myocardial infarction and was placed on ramipril, metoprolol, acetylsalicylic acid (ASA), and pravastatin.



A few weeks later, after an uneventful recovery, he was feeling quite tired, had difficulty with erections, and had memory loss. He believed this came from the medications and he decided to stop his pills. He then visited a naturopath who suggested he take St. John's Wort, garlic, and ginkgo biloba. He returns to see you and his blood pressure is 160/95 mmHg. He is feeling much better since stopping the medications and herbal remedies. He would like to continue taking them, but also wants to stay on the ASA.

**What would you say and do?**

**For answers, see page 120.**

## What are the indications?

Many scientific studies demonstrate the usefulness of acupuncture.<sup>1-5</sup> The National Institute of Health, in their 1997 consensus conference, said there is evidence for the effectiveness of acupuncture for post-operative and chemotherapy-induced nausea and vomiting, some painful conditions, addiction, stroke rehabilitation, headache, dysmenorrhea, tennis elbow, carpal tunnel syndrome, fibromyalgia, and asthma.

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### What are the side-effects?

Occasionally, mild pain, minimal bleeding, or bruising can result at needle insertion points. Serious infections, like acquired immune deficiency syndrome (AIDS) and hepatitis B and C, have been spread through improper sterilization. Autoclaving is important. Most practitioners use disposable needles, while some use expensive electrical and laser acupuncture, avoiding needle use altogether. However, because there is often no regulation of practitioners, proper hygiene is sometimes overlooked. Patients should be advised to be careful when choosing an acupuncturist, and to select someone who uses disposable needles.

Certain acupuncture points are contraindicated in pregnant women because acupuncture has been known to cause miscarriages. Certain acupuncture points are dangerous if needled incorrectly, so proper training and knowing one's limits are crucial. Pneumothorax secondary to improper needling can occur, and patients presenting with sudden onset of shortness of breath should be asked if they have had acupuncture recently.

### What's manipulation?

Manipulation is a single, short, high-velocity, usually low amplitude thrust that is executed at the end of a passive movement. Manipulation may be performed by chiropractors, medical doctors, osteopaths, and physiother-

apists. Most chiropractors limit their scope of practice to the muscular skeletal systems. Often chiropractors also use TENS, ultrasound, hot and cold packs, and massage.

Chiropractors generally believe that a vertebral subluxation creates abnormal movement in a spinal joint, often causing neurologic and vascular involvement, and often a structural displacement of a vertebra. By removing the subluxation by adjustment or manipulation, pressure is alleviated on the nervous system and promotes a return to normal function.

### What are the indications?

Patients who present with an acute history of back pain ("It all started when I bent to pick something up. Something still feels out of place") can often be helped with a simple manipulation.<sup>6</sup>

There are at least two randomized studies showing that chiropractic manipulation has reduced migraine frequency and severity.<sup>7,8</sup> There are also randomized, controlled trials

demonstrating chiropractic treatment to be more effective for low back pain of mechanical origin<sup>9</sup> and spinal pain. Patients expressed greater levels of satisfaction with chiropractic care, as compared to medical care,<sup>10</sup> for low back pain. Many countries include manipulation as a treatment for low back pain in their national clinical guidelines.<sup>11,12</sup>

Dutch researchers did a meta-analysis of 35 randomized trials comparing manipulation with other treatment modalities. Spinal manipulation improved outcome in



**For a good move  
see page 18**

Table 1

#### Reasons patients don't tell physicians they are using alternative medicine

- Fear of being dismissed, ridiculed, or judged
- Belief that doctors are simply not interested in alternative therapies
- Belief that what they are doing is entirely safe



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patients from 18 of the 35 studies. However, most of the studies were of very poor quality.<sup>13</sup>

There is great controversy over the relationship between neck manipulation and stroke.<sup>14,15</sup> Although there appears to be some relationship between stroke and cervical manipulation, the exact risk and whether manipulation causes stroke is unclear.

### *Are there contraindications?*

There are several situations where manipulation should not be performed<sup>16</sup> (Table 2). There is no scientific proof that manipulation helps for conditions like high blood pressure, asthma, constipation, gallbladder disease, thyroid conditions, or diabetes.

There are courses where physicians can learn basic manipulation skills, which can be an important adjunct to dealing with musculoskeletal problems in primary care.

### *What are the dangers of herbs?*

Although herbs have been used for centuries without major problems there are some reports of toxicity and side-effects of the use of plant products.<sup>17</sup> The soil, climate conditions, and storage affect their potency. Toxic ingredients, pesticides, non-declared drugs, or added chemicals can contaminate herbal preparations. Herbs can have anti-cholinergic, hallucinogenic, cathartic, irritative, carcinogenic, and allergic effects. They should be used with caution in pregnancy.

Patients should buy herbs from a reputable source, and be warned not to believe unsubstantiated claims of miracle cures. It is important to explain to patients what is a randomly assigned, double-blind, controlled study,

Table 2

#### Situations where manipulation should not be performed

- On a joint where there is infection
- Bone or joint pathology, except for loose bodies
- If a patient has a blood dyscrasia, or is on anticoagulant therapy
- If there is a vertebral artery syndrome, or an abdominal aorta with extensive atherosclerosis
- If there is a neurologic lesion involving the spinal chord, or there is a vertebra which is weakened by osteoporosis or the presence of a tumour or fracture

and how that compares to anecdotal information. In most traditions, herbs are always used in combinations. Most of the research, however, has been done on single herbs.

There are many double-blind controlled trials showing the effectiveness of herbs (Table 3). Herbs are being used worldwide in many traditional soci-

eties, and they are relatively safe, but it is increasingly important to educate patients about side-effects. Perhaps the biggest concern is the interaction between herbs and modern drugs. It is crucial to ask all patients if they are taking herbs or vitamins, or if they are using alternative treatments.

### *What is “homeopathy”?*

In the late 1700s, Dr. Samuel Hahnemann found that a substance that produces a certain set of symptoms in a healthy person can be used to reduce the same symptoms in a sick person if the substance was given in very small doses. In allopathic medicine, we attempt to oppose, suppress, or cover over symptoms, whereas in homeopathy, remedies are matched to the symptoms. Hahnemann believed that remedies retain their biological activity if they are serially diluted and shaken between each dilution. These theories often draw the wrath of medical doctors because they go against common medical thinking.

### *What about the negative trials?*

Homeopathy has not been shown to be useful for headaches, migraines,<sup>18</sup> or chronic asthma.<sup>19</sup> Arnica, a popular remedy for trauma, has not been shown to be useful in a review of eight trials.<sup>20</sup> Ernest Ernst, a

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researcher in the area of complementary medicine,<sup>21</sup> believes there is no evidence that homeopathy is better than placebo. Many physicians believe that many of the positive studies suffer from major drawbacks, and there have not been many duplications of the successful research.

### *What about the positive trials?*

Homeopathy was shown to be useful in randomly assigned, double-blind, controlled trials in post-operative ileus,<sup>22</sup> the treatment of influenza-like syndromes,<sup>23</sup> vertigo, acute otitis media,<sup>24</sup> and the use of galphimia glauca in polinosis. Homeopathy has been better than placebo in children with diarrhea, in patients with perennial allergic rhinitis and/or hay fever,<sup>25</sup> and in mild traumatic brain injury.<sup>26</sup>

### *What has meta-analysis established?*

Kleijnen, et al (did a meta-analysis of 107 controlled trials),<sup>27</sup> Linde, et al (reviewed 89 placebo-controlled, randomly assigned, double-blind studies,<sup>28</sup> and reviewed 32 more trials later), and Cucherat<sup>29</sup> did a meta-analysis of 118 randomized trials. They found homeopathy was significantly more effective than placebo. However, the evidence was low because of the low methodologic quality of the trials. Homeopathy is safe and rarely causes serious side-effects.

### *How do we talk to patients?*

It helps to understand patients' ways of thinking about health and treatment and find some common ground on which to agree. Rather than attacking patients' beliefs, it is helpful to understand where they are coming from and how they developed these opinions and, sometimes, mistrust of modern medicine.

Many physicians have taken further training to integrate some of these safe and effective alternatives into their practice. All physicians should know practical information about vitamins, herbs, and other treatments they can apply to their practices. It is not appropriate to call these patients "kooks" or "health-food nuts," or to advise them to throw the whole lot in the garbage.

## Treating John

John could benefit from blood pressure control and medicine to prevent another heart attack. However, he felt unwell, and so discontinued all his medications. Perhaps John is depressed. Educate him about the risks and benefits of conventional therapy. Negotiate that he take some of the medications, and perhaps drop the beta blocker, and see if the erectile dysfunction and tiredness wane. He cannot take ginkgo and acetylsalicylic acid together because of the risk of spontaneous bleeds. Explain the risk benefit of both treatments and let him decide which to take. Staying on the St. John's Wort may help with his depression. Give John a number of followup visits, making sure he is making well-informed choices.

Table 3

### Successful herbal remedies and their indications

<u>Herbal remedy</u>	<u>Indication</u>
Gingko biloba	Alzheimer's disease and intermittent claudication
St. John's wort	Mild to moderate depression with comparable results to the tricyclics and SSRIs
Saw palmetto	Prostatism
Feverfew	Migraine headaches
Echinacea	Shortening the symptoms of a cold if taken at the beginning of symptoms
Ginseng	Erectile dysfunction

SSRIs: Selective serotonin reuptake inhibitors

### What's our role?

Physicians cannot be expected to have expertise in every alternative treatment. However, it is important to familiarize ourselves with the expanding field of complementary medicine, so we can help patients make informed decisions about choices they have to make. We can be patient advocates, and protect our patients from misinformation, harmful treatments, and quackery. Patients want caring, supportive, kind, accepting, and non-judgmental physicians.<sup>30</sup>

The more tools we have for dealing with the many problems that do not respond to drugs and surgery, the better medicine will be able to confront the challenges of the next century. [CME](#)

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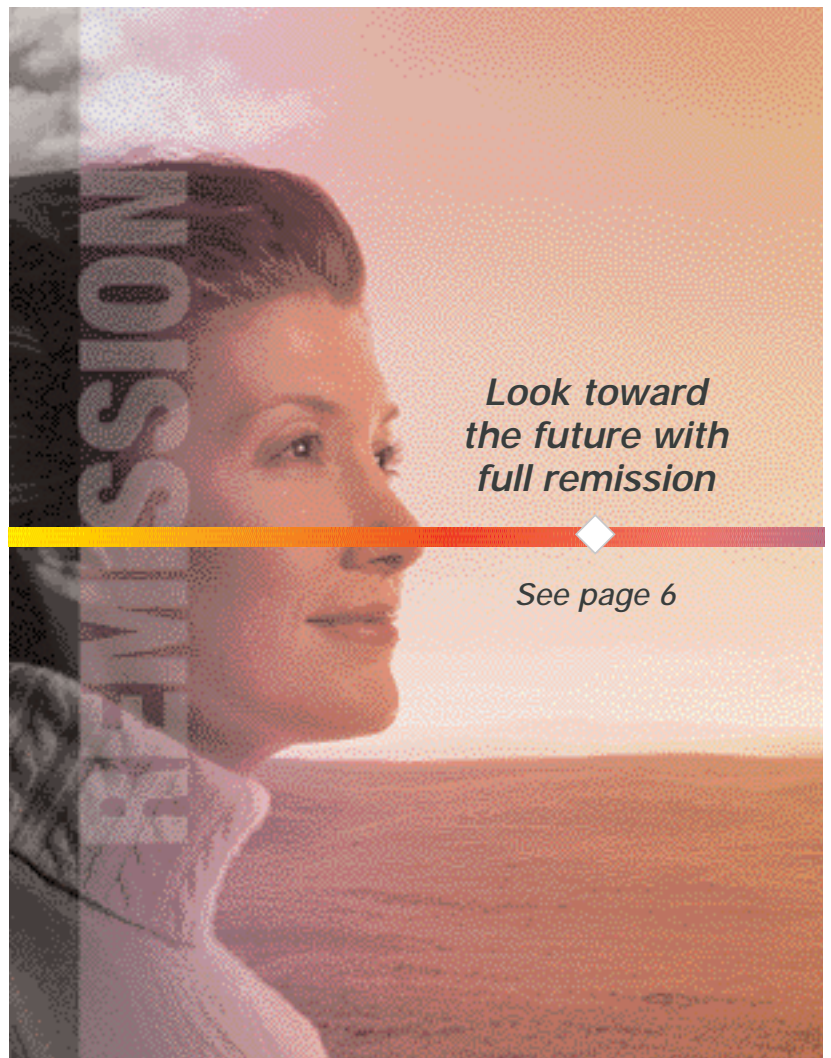
### Take-home message



**Remember, when dealing with patients who use alternative medicine:**

- There are hundreds of different alternative medicine practices.
- Practices like acupuncture, herbs, manipulation, and homeopathy have some support through randomly assigned, double-blind, controlled trials. With training, these could be integrated into a physician's armamentarium.
- Physicians have difficulties dealing with patients who have different belief systems than their own.
- Don't dismiss patients. Listen, educate, explain risks and benefits, and maintain contact.

*Cont'd on page 124*



*Look toward  
the future with  
full remission*

*See page 6*

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### Suggested Readings

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## Net Readings

The Evidence-Based Complementary and Alternative Medicine Website for Healthcare Professionals  
[www.camline.org](http://www.camline.org)

2. National Center for Complementary and Alternative Medicine  
<http://nccam.nih.gov/>
3. The European Scientific Cooperative on Phytotherapy  
[www.escop.com](http://www.escop.com)

## Frequently Asked Questions

### 1. Where can I get training in acupuncture?

The Acupuncture Foundation of Canada Institute provides practical courses for physicians, dentists, and physiotherapists. For more information, call (416) 752-3988 or write the Institute at 2131 Lawrence Ave. East, Suite 204, Scarborough, Ontario, M1R 5G4.  
Web: [www.afcinstitute.com](http://www.afcinstitute.com)

### 2. How does acupuncture work?

Acupuncture analgesia was blocked by naloxone, implying that acupuncture analgesia is produced by stimulation of the body's endogenous opiates or endorphins. It's also been shown that electroacupuncture increases blood cortisol levels in horses and human beings. Another possible mechanism is that acupuncture stimulates serotonin, gamma-aminobutyric acid transaminase, and acetylcholine which act as neurotransmitters which mediate pain response. Traditional Chinese medicine practitioners might say that illness occurs when there is a disruption of energy along the pathways, and by placing needles along these points there is a re-establishment of the energy flow, and healing takes place.

### 3. Why do patients choose alternative methods?

Some are dissatisfied with conventional medicine. Many patients have had bad experiences with modern medicine and believe it has too many side effects. They believe alternative approaches are safer, gentler, and free of side-effects. Since many of the remedies are self-administered, patients feel more in control of their own health.

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