

## **Complementary and alternative medicine and dementia**

Public interest in complementary therapies is growing at a significant rate, easily outpacing the research conducted into their safety and effectiveness. People are often attracted to the 'natural' and safe image of these therapies, particularly in treating chronic medical conditions, for which conventional treatments are often less than completely effective. This sheet addresses some of the issues surrounding the use of complementary and alternative treatments and outlines the current evidence for their effectiveness.

### **What is complementary and alternative medicine?**

The term complementary and alternative medicine (CAM) covers many therapies. There is no apparent connection between many of these therapies, which often have diverse origins, theories and appearances.

There is no precise definition of what exactly constitutes CAM. A good practical definition is 'interventions neither taught widely in medical schools, nor generally available in hospitals'. What may be 'complementary' medicine in one country may be 'conventional' in another. Vitamin supplementation may or may not be considered CAM depending on whether the dose is the recommended daily amount or not. Furthermore, many health care professionals now offer CAM treatments within the bounds of the NHS.

Common therapies that are covered in this leaflet include herbal medicine, aromatherapy and massage, music therapy, acupuncture, dietary supplements and melatonin and bright light therapy.

### **Complementary versus alternative medicine**

CAM should only be used in addition to, not instead of, conventional medicine. If you decide to use CAM, it is important that you continue to see your doctor and keep him or her informed of the treatments you are undergoing and any medication you are taking.

Although most CAM therapies have a good safety profile, it is not true to say that they are 100 per cent safe just because they are 'natural'. There are serious safety concerns about some forms of complementary and alternative medicine. For example, herbal preparations may interact harmfully with conventional drugs. It is, therefore, very important for your doctor to know what you are taking.

Don't worry about telling your doctor what you are using. Awareness of complementary and alternative medicine is increasing amongst the medical profession and most doctors are sympathetic to its use.

### **Is CAM widely used?**

Surveys conducted in the UK suggest that as many as one-third of the population have used some form of CAM at some point in their lives.

This interest helps to encourage research in the area. A report by the House of Lords called for more regulation and more research to investigate effectiveness and safety. This could lead to the provision of better services and sounder evidence to guide this use.

## **What is the potential for CAM to treat dementia?**

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Preventing the progression of dementia is currently the subject of trials of ginkgo biloba and of vitamin E. One review concludes from a number of studies that good nutrition, in the form of vitamins, minerals and other micronutrients, may prevent cognitive decline.

## **Does it work?**

There is little high-quality research into the treatment of dementia with complementary and alternative medicine. However, a number of therapies are providing some interesting preliminary results and these are detailed here.

Many therapies are not listed here. This does not mean that they are ineffective or would not be of any benefit to you, although your doctor is likely to provide the best available proven care. If you feel that you would benefit from complementary and alternative medicine in addition to conventional treatment, this is perhaps a good indication of its worth to you.

## **How can I get access to complementary and alternative therapies?**

The first person to speak to about getting access to CAM is your doctor. He or she may be able to refer you through the NHS, or they may be able to offer advice on good quality practitioners in your area.

Most CAM therapies have one or more governing bodies. These are often self-regulated, setting standards for the training and services provided and codes of conduct for practitioners.

The addresses for governing bodies or organisations representing practitioners are given for each of the therapies detailed here. These organisations will be able to give you details of therapists in your area.

For further information on therapies not listed here, and on accredited practitioners, contact:

### **The British Complementary Medicine Association**

PO Box 2074  
Seaford  
East Sussex  
BN25 1HQ

Telephone: 0845 345 5977

Fax: 0845 345 5978

Email: [web@bcma.co.uk](mailto:web@bcma.co.uk)

Website: <http://www.bcma.co.uk/>

It is vital that you feel comfortable with and trust any therapist you visit. An important part of CAM is the development of a therapeutic relationship between you and the therapist. At the first meeting, you should establish:

- What the treatment will entail
- The frequency and number of visits that the treatment is likely to require
- The likely cost of the treatments
- What you can expect from the treatments.

A good therapist should encourage continued care with your doctor and possibly even liaise with them. They should also have a realistic attitude towards the therapy - for example, they should talk through possible side-effects you may experience as well as potential benefits. Tell the therapist about any conventional medications you are taking.

## **Ginkgo biloba**

Based on current evidence, it appears that CAM can be of benefit in the symptomatic treatment of dementia, mainly in the form of standardised extract of ginkgo biloba.

The evidence for ginkgo biloba is encouraging. It seems to have a small but beneficial effect on mental functioning and behaviour. It also seems to have few side-effects.

However, further research is required, and issues such as its potential for preventing dementia, its comparability to conventional treatments and its effectiveness in primary care need to be specifically addressed.

## **What is ginkgo biloba?**

Ginkgo biloba extract is derived from the dried leaves of the ginkgo tree (ginkgo biloba L, more commonly known as the 'maidenhair' tree). This tree, native to China, has survived unchanged for more than 200 million years and is widely cultivated ornamentally around the world. In the west it is usually the leaf that is used medicinally.

Ginkgo biloba is popular in Europe for treating circulatory conditions. There is growing evidence supporting its use in the treatment of dementia.

## **Does it work?**

The evidence that ginkgo biloba helps the symptoms of dementia is promising.

Good reviews of ginkgo trials have been published. One review concluded that ginkgo had a small but noticeable effect on mental functioning. Several trials support the notion that it can delay the progression of symptoms, but whether this translates into a noticeable difference is questionable. The reviews call for more research to determine whether ginkgo helps improve more general functioning, in order to determine the best dosage, and to establish its exact clinical value.

## **Is it safe?**

Adverse side-effects associated with ginkgo may be no greater than those linked to placebo ('dummy') treatments. There are some concerns, however, about problems occurring when it is taken at the same time as some other medications or where the patient has certain pre-existing medical conditions.

Some of these concerns are based on reports in the literature but others are 'theoretical' concerns. It is, however, wise to be cautious. Interactions with other medications have been reported and it is very important that you keep your doctor informed if you take this or any other herbal supplement. Particular care must be taken if you are on anticoagulant therapy - for example, Warfarin or aspirin - or if you have problems with blood clotting.

## **How much should I take?**

We do not know what the ideal dose of ginkgo biloba is for dementia. It is therefore advisable to take doses that have been used in previous studies. These are generally standardised extract doses of 120mg or 240mg. These should be taken in a divided daily dose: for example, 40mg three times a day. Available preparations vary considerably in their content, but those containing 24 per cent flavoneglycosides and 6 per cent terpene

lactones appear ideal. This may be expressed as a quantity, so for a 40mg pill this would be 9.6mg flavoneglycosides and 2.4mg terpene lactones.

### **Where can I get it?**

Ginkgo biloba is available over the counter in pharmacies and health food shops and over the internet. A number of products are available and care must be taken because there is significant variation in quality.

## **Other treatments that have been shown to be useful for people with dementia**

### **Herbal medicine**

Herbal medicine is the use of plants to restore or maintain health. Phytomedicine is a term often used to denote a more scientific approach to herbal medicine, where, for example, products are standardised and concentrated to contain specified amounts of the identified active substances in the herbal products. More rigorous research is also usually undertaken.

There is variation in the quality and, therefore, the levels of the active constituents of herbal products. Herbal medicines are generally regulated as foodstuffs or dietary supplements in the UK. As such, there is the potential for self-medication, as they can be bought over the counter from most health food shops. If you are interested in self-medication, consult your doctor first and buy a recognised brand by a leading manufacturer.

### **Silymarin**

Silymarin is an extract of milk thistle (*silybum marianum* L), a tall herb with prickly leaves and a milky sap. Native to the Mediterranean region of Europe, it is now naturalised in California and the eastern USA.

Silymarin is alleged to help the functioning of the liver. It may reduce the side-effects experienced with Tacrine (a conventional drug used to treat dementia, not available in the UK) that may cause liver problems. One study found that 420mg of Silymarin a day seemed to reduce the number of cases of liver toxicity in those taking it and found that the drug was well tolerated.

### **Choto-san**

'Kanpo' is a Japanese variant of Chinese traditional medicine. The 'Kanpo' mixture Choto-san, which contains 11 medicinal plants, has been the subject of investigation. A research study found an improvement over 12 weeks in patients with vascular dementia taking Choto-san. Further research on this preparation seems warranted.

## **Kami-Umtan-To**

Another Kanpo mixture, Kami-Umtan-To (KUT), which contains 13 different plants, has also been investigated. The KUT review reports that a clinical trial found a slower decline in the group given this preparation.

## **Yizhi capsule**

The Chinese traditional herbal medicine Yizhi capsule (YZC) has also been the subject of investigation. Two studies used patients with vascular dementia. However, although both reported positive results, the studies were not of a high standard. Further research into this preparation also seems warranted.

To consult a professional western herbalist, contact:

## **National Institute of Medical Herbalists**

56 Longbrook Street  
Exeter  
Devon  
EX4 6AH

Telephone: 013 9242 6022  
Fax: 013 9249 8963  
Email: [nimh@ukexeter.freeserve.co.uk](mailto:nimh@ukexeter.freeserve.co.uk)  
Website: <http://www.nimh.org.uk/>

For a Chinese or Japanese herbalist, contact:

## **Register of Chinese Herbal Medicine**

British Acupuncture Council  
63 Jeddo Road  
London  
W12 9HQ

Telephone: 020 8735 0400  
Fax: 020 8735 0404  
Email: [info@acupuncture.org.uk](mailto:info@acupuncture.org.uk)  
Website: <http://www.acupuncture.org.uk/>

## **The British Kanpo Association**

Kailash Centre  
7 Newcourt Street  
London

NW8 7AA  
Telephone: 020 7722 3939

## **Aromatherapy and Massage**

Aromatherapy is the therapeutic use of essential oils derived from plants. The oils are generally:

- Applied directly to the skin, often accompanied by massage
- Heated in an oil burner to produce a pleasant odour
- Placed in a bath.

The oils are concentrated and should be used according to instructions - they should be diluted before being applied to the skin, for example.

Research funded by the Mental Health Foundation in 2000 highlighted the potential benefits of aromatherapy, specifically the use of melissa officinalis, or lemon balm, in the treatment of Alzheimer's disease. Researchers at Newcastle University's Medicinal Plant Research Centre believe that lemon balm may help prevent the loss of the key brain chemical acetylcholine. The loss of this chemical is one of the changes associated with Alzheimer's. Lemon balm may then work in the same way as the first generation of drugs for Alzheimer's disease, Aricept and Exelon.

This research suggests that aromatherapy may have a more specific role in the treatment of Alzheimer's than aiding relaxation. It highlights the need for further research.

In 2002, a paper by Alistair Burns in the British Medical Journal added weight to the potential benefits of aromatherapy for people with dementia, used as an alternative to neuroleptic drugs.

There are many different types and schools of massage in existence, but common to them all is the tactile manipulation of the body's soft tissue using the direct contact of the practitioner.

There is some evidence that aromatherapy - either alone or in combination with massage - is effective in helping people with dementia to relax. One trial compared aromatherapy and massage, aromatherapy and conversation, and massage only. It found that excessive 'wandering' could be reduced by aromatherapy and massage in combination.

Another study investigated lavender oil on a hospital ward, and showed a reduction in agitated behaviour. The benefits of aromatherapy and massage and expressive physical touch (which generally includes gentle massage) have also been reported, although one review of a number of studies reported inconclusive findings.

For further information, contact:

## **International Federation of Aromatherapists**

182 Chiswick High Road  
London  
W4 1PP

Telephone: 020 8742 2605  
Website: [www.ifaroma.org/](http://www.ifaroma.org/)

## **General Council for Massage Therapy**

46 Millmead Way  
Hertford  
SG14 3YH

Telephone: 019 9253 7637  
Email: [admin@gcmt-uk.org](mailto:admin@gcmt-uk.org)  
Website: <http://www.gcmt-uk.org/>

## **Music therapy**

Music therapy is the creative use of musical improvisation by both client and practitioner to create a relationship in which healing can take place.

A review of music therapy for dementia concluded that, based on the available evidence, it may be beneficial in treating symptoms and improving the quality of life of people with dementia and their carers.

Music therapists should be registered with:

## **Health Professions Council**

Park House  
184 Kennington Park Road  
London  
SE11 4BU

Telephone: 020 7582 0866  
Fax: 020 7820 9684  
Website: <http://www.hpcuk.org/>

## **Accupuncture**

Accupuncture originates in China and views health disorders as resulting from imbalances in the flow of energy ('chi' or 'qi', pronounced 'chee') around the body. Accupuncture

attempts to unblock the energy pathways ('meridians') to restore functioning. It uses very fine needles inserted into the skin to produce the therapeutic effect.

As acupuncture has grown more popular in the west, theories about it based on western models of medicine have developed. For example, some practitioners believe that it reduces local muscle tension or that it affects the way the body reacts to pain. Both traditional and more modern forms of acupuncture are practised.

A number of studies have addressed the use of acupuncture for treating Alzheimer's disease and vascular dementia. Although these studies all report positive effects they are generally not very well conducted. One further small study investigated the treatment of associated mental problems (anxiety and depression) in dementia. It found an improvement in these areas and it also seemed to halt the decline in mental functioning amongst the participants. Better quality studies are needed to confirm these positive preliminary findings.

For doctors who practise acupuncture contact:

### **The British Medical Acupuncture Society**

12 Marbury House  
Higher Whitley  
Warrington  
Cheshire  
WA4 4QW

Telephone: 019 2573 0727

Fax: 019 2573 0492

Email: [admin@medical-acupuncture.org.uk](mailto:admin@medical-acupuncture.org.uk)

Website: <http://www.medical-acupuncture.co.uk/>

Some chartered physiotherapists are also qualified in and practise acupuncture. For a register of members of the Acupuncture Association of Chartered Physiotherapists contact:

### **AACP Secretariat**

Portcullis  
Castle Street  
Mere  
Wiltshire  
BA12 6JE

Telephone: 017 4786 1151

Fax: 017 4786 1717

Email: [sec@acp.org.uk](mailto:sec@acp.org.uk)

Website: [www.longbo.demon.co.uk/acp.html](http://www.longbo.demon.co.uk/acp.html)

For more traditional forms of acupuncture contact:

## **The British Acupuncture Council**

63 Jeddo Road  
London  
W12 9HQ

Telephone: 020 8735 0400

Email: [info@acupuncture.org.uk](mailto:info@acupuncture.org.uk)

Website: <http://www.acupuncture.org.uk/>

## **Dietary supplements**

Good diet is essential for health. The use of vitamins and other supplements is often considered CAM even though it may not technically be so.

### **Antioxidants**

There is growing evidence demonstrating the effectiveness of these compounds, which are found naturally in fruit and vegetables, in preventing the development of Alzheimer's disease. Reviews of the existing work in this area have been done and several antioxidants have shown positive effects: in particular, ginkgo biloba, vitamin E, selegiline and idebenone.

One study examined vitamin E (2,000 units daily), selegiline (10mg daily) and a combination of the two in Alzheimer's disease, for a two-year period. The results were positive, although there is some controversy over the way they were reported. There seemed to be fewer falls in the group taking vitamin E. The authors recommend replication of the study to confirm their positive results. A large study investigating the possible prevention of dementia in patients with mild memory problems by taking vitamin E daily is currently underway. A study of idebenone found it to have a positive effect in Alzheimer's disease, with a dose-dependent effect (a better effect with a greater dose). It was also found to be safe. Positive effect and safety remained good after two years on the supplement.

### **General nutrition**

Weight loss in patients with Alzheimer's disease is a recognised problem. It seems to be due to lack of attention to proper nourishment rather than part of the disease process. Dietary supplementation can produce a significant increase in body weight amongst patients with dementia, as found in patients on a hospital ward. Nutritional awareness is

important for elderly people in general: one study of 96 healthy individuals aged 65 or over found that dietary supplementation of vitamins and trace elements improved mental function.

For more information, contact the professional body for dieticians:

### **British Dietetic Association**

5th Floor  
Charles House  
148/9 Great Charles Street  
Queensway  
Birmingham  
B3 3HT

Telephone: 012 1200 8080

Website: <http://www.bda.uk.com/>

## **Melatonin and Bright Light Therapy**

The hormone melatonin, released by the pineal gland and considered important in regulating sleeping behaviour, has been cited as a beneficial supplement for patients with sleep disturbances.

Sleep disorders and disruptive nocturnal behaviour associated with dementia present a significant clinical problem. A characteristic pattern of sleep disturbance referred to as 'sundowning' has been described. This shows itself in increased arousal and activity, usually in the late afternoon, evening or night and is a cause of increased stress for carers.

There is considerable theoretical evidence to support the use of melatonin as a treatment for sleep disturbance associated with dementia. Melatonin is a hormone implicated in the control of the sleep-wake cycle. It is stimulated during darkness and suppressed by light. While the effects of melatonin have been extensively studied in animals, there is growing evidence that melatonin is also involved in the regulation and control of sleep and waking patterns in humans. Dementia appears to disturb these patterns.

One small but well conducted study evaluated the effect of bright light therapy in combination with melatonin or a placebo on restless behaviour. Bright light therapy was found to help restless behaviour, but the addition of melatonin negated the effect. Further research in the use of bright light therapy is necessary. A review found evidence to support the use of light therapy from four small studies, but again with calls for replication of the findings.

Courtesy: <http://www.alzheimers.org.uk/factsheet/434>