Complementary therapy and obstetrics and gynaecology: a time to integrate

Michael Dooley

Purpose of review

The purpose of this review is to assess the evidence and role of complementary and alternative medicine in obstetrics and gynaecology. There is increasing patient interest and use of complementary and alternative medicine therapies and there is thus a need for health practitioners to be appropriately informed of different complementary therapies.

Recent findings

This article reviews the background to complementary and alternative medicine and the evidence although limited for its introduction into mainstream obstetrics and gynaecology; the difficulty in obtaining good evidence is also discussed.

Summary

The conclusions drawn are that we need to develop an integrated approach to healthcare and this is particularly relevant and important in obstetrics and gynaecology. With this integration, clinical research is essential and needs encouragement from all levels.

Keywords

complementary medicine, gynaecology, integrated medicine, obstetrics

Curr Opin Obstet Gynecol 18:648-652. © 2006 Lippincott Williams & Wilkins.

The Poundbury Clinic, Dorchester, Dorset, UK

Correspondence to Michael Dooley, The Poundbury Clinic, Middlemarsh Street, Poundbury, Dorchester, Dorset DT1 3FD, UK Tel: +44 1305 262626; e-mail: gynaecology@mdooley.co.uk

Current Opinion in Obstetrics and Gynecology 2006, 18:648-652

Abbreviations

CAM complementary and alternative medicine NHS National Health Service

© 2006 Lippincott Williams & Wilkins 1040-872X

Introduction

We need to end the Berlin Wall between complementary and conventional medicine and integrate them. It is not that one is better than the other but that there can be synergy between them both

Peter Hain, Leader House of Commons, 2004

When one compares orthodox and traditional medicine, traditional medicine has been around for many thousands of years and handed down over the generations, whereas orthodox medicine is only hundreds of years old.

In this paper I will use the terms orthodox medicine, as the conventional medicine, and complementary and alternative medicine (CAM).

The aim of the paper is to demonstrate that both areas of medicine have very important roles and we must not disregard either. The future is to integrate the two to allow for a comprehensive holistic approach to our patient care.

Definitions

What is complementary medicine? The Oxford English Dictionary quotes, 'it is a medical therapy that falls beyond the scope of scientific medicine and may be used alongside it in the treatment of disease and ill health'. The *Cochrane Database* describes CAM as, 'the diagnosis, treatment and/or prevention which complements mainstream medicine by contributing to a common whole, by satisfying a demand not met by orthodoxy or by diversifying the conceptual frameworks of medicine'.

Chez and Jonas [1] defined CAM as recognizing the link between a person's body, mind and spirit and creating a more holistic approach to patient care. The Oxford English Dictionary definition of orthodox is 'conforming with traditional or generally accepted beliefs – conventional'.

Integrated healthcare means encouraging conventional and complementary practitioners to work together to integrate their approaches. This approach has been driven by His Royal Highness, The Prince of Wales who, when President of the British Medical Association in 1982–1983 stated 'today's unorthodoxy is probably going to be tomorrow's convention'. The Prince's Foundation

for Integrated Health (FIH) aims to facilitate the development of safe, effective and efficient forms of healthcare to patients and their families by supporting the development and delivery of integrated healthcare.

Introducing unorthodoxy in gynaecology is not unheard of. Kurt Semm (the German Gynaecologist who died in 2003) in 1972 was the first to perform a laparoscopic nucleation of an ovarian cyst. Nowadays this is standard surgery. When he first published his work, however, it was rejected and quotes included, '... the German scientific world should not pay attention to such nonsense'.

Uptake

An estimated 5.75 million people a year in the United Kingdom go to see a complementary practitioner for treatment. Ten million per year use some sort of CAM and about £1.6 billion is spent per year on CAM.

As many as 90% of people who use complementary healthcare access it outside of the UK National Health Service (NHS). Since its use is confined mainly to the middle and professional classes it seems likely that cost is a deterrent. It is essential that there is equality of access to appropriate forms of complementary healthcare and we need to encourage the NHS provision [2].

In 2004 49% of general practitioners (GPs) offered access to some form of CAM and there is beginning to be much greater Government support, with five NHS homeopathic hospitals in the UK. In a USA survey of certified nurse midwives in 2000 94% of midwives reported recommending some form of CAM to their clients [3]. Uses include labour analgesia, augmentation and induction.

Individuals use CAM for different reasons. Individuals feel more involved with their care and are more in harmony with their personal philosophies. Concerns are always raised about the adverse effects of orthodox treatment and there was greater harmony with their personal philosophies [4].

Professor Sir Graeme Catto, President of the UK General Medical Council (GMC) (2005) indicated that all clinicians must be aware that many patients are interested in and choose to use the range of alternative and complementary therapies. He went on to state that those practising orthodox medicine must be aware of the existence of such therapies, why some patients use them and how these might affect other types of treatment the patient is receiving.

Evidence

There is concern about the lack of evidence of CAM. These concerns do need to be addressed but the baby need not be thrown out with the bath water. The purpose

of those that are in must not be to keep those that are out, out. We must have an open mind. One of my true heroes was Socrates and as can be read in Plato's book The Trial and Execution of Socrates, he was executed because 'he knew that he did not know'.

Is it just a placebo response? Studies have demonstrated that CAM practitioners are good clinicians who work in an environment that can inspire confidence and with this maximize the placebo response. Professor Ernst from the University of Exeter when discussing homeopathy has stated that we should look at the practitioners and see what we can learn from the way in which they work.

We must not become blinkered and many authorities have concluded that at least some aspects of the complementary approach may have a lot to offer. Ideally they should be put to the scientific test but this has practical problems. Professor David Weatheral FRS from the University of Oxford concluded that regardless of what a patient is suffering from, their reaction to their situation and their state of mind are of critical importance and to ignore them in the face of high technology and medical practice is to court disaster. A recent article in the British Medical Journal [5] demonstrated the problems with conventional studies and CAM therapies. The randomized placebo controlled study was developed to test new drugs and is based on biomedical assumptions. In a drug trial, the elements such as talking and listening are defined as incidental (placebo) factors and separate from the characteristic drug treatment. In acupuncture and other nonpharmaceutical therapies the characteristic and incidental factors are intertwined. The use of placebo or sham controlled trial designs for complex interventions may lead to false negative results.

In 2004 a cost effectiveness report was commissioned by HRH The Prince of Wales, which was published in 2005 [6°]. One of the recommendations was that despite the fragmentary nature of the evidence, there seems good reason to believe that a number of CAM treatments offer the possibility of significant savings in direct health costs, although this study was not directly investigating obstetrics and gynaecology. The report had recommended that health ministers should invite the National Institute for Health and Clinical Excellence (NICE) to carry out a full clinical assessment of the cost effectiveness of the 'big five' CAM therapies. These are osteopathy and chiropractic, acupuncture, homeopathy and herbal medicine. It also recommended that there is a huge imbalance in the funds available for research into the cost effectiveness of conventional and CAM treatments. Research into complementary medicines was 0.08% of the NHS research budget in 2003. This research funding imbalance should at least be partially redressed as CAM therapies may have potential in a wider range of applications. Finally the

importance of looking at safety considerations of CAM therapies and proper regulation was recommended.

Despite the evidence that a lot of our patients are using CAM therapies, the knowledge base of orthodox doctors is poor. There is a high level of usage and satisfaction with both conventional and complementary treatment for the relief of menopausal symptoms. GPs and hospital doctors are poor sources of information on complementary therapies for menopausal women and it is important to develop education programmes to include integrated healthcare. Integrated healthcare is part of the core curriculum in medical schools in the USA. Medical schools in the UK are beginning to include it into their curriculum and there is a Centre for Complementary Medicine in Peninsula Medical School.

Regulation

Regulation needs to be addressed. In the USA CAM is regulated state by state. The World Health Organisation has recently published guidelines for the assessment of herbal medicine [7].

In the UK the House of Lords recently reviewed CAM therapies and recommended clearer regulation of acupuncture and herbal medicine.

Patients want and need to be protected from unqualified complementary practitioners and inappropriate treatments. There is always cause for concern. All healthcare practitioners, however, have a legal duty of care towards their patients whether they are practising a therapy that is statutorily regulated or voluntarily regulated. This means that any practitioner has a duty not to harm patients and if a patient does suffer harm due to a practitioner's negligence, the practitioner can be sued in a court of law by the patient.

Osteopaths and chiropractors are regulated by law like doctors, nurses and midwives. The other complementary healthcare practitioners are at different stages of developing voluntary systems of regulation. Some complementary practitioners are also doctors, nurses, midwives, physiotherapists and pharmacists who are regulated by law as registered members by their medical professions.

There is always concern regarding referral and delegation. Under the terms of the GMC the doctor transfers some or all of the responsibility of the patient's care when a referral is made to another practitioner. A doctor is only permitted to make a referral to another practitioner if such healthcare workers are accountable to a statutory regulatory authority. Thus in most cases when a doctor refers to a CAM practitioner he is only delegating care. This requires the doctor to be responsible and accountable for the overall management of the patient. Doctors

do need to know that any delegation is to a competent practitioner. The development of integrated clinics with strict rights of practice is the way forward. At The Poundbury Clinic, an integrated clinic for women, practitioners need to fulfil several criteria. These include being appropriately trained and qualified, being a member of a professional organisation and holding adequate insurance. Each practitioner needs to produce evidence of continuing professional education and have a robust complaints procedure. References are obtained before rights are granted and all practitioners have UK Criminal Records Bureau (CRB) clearance.

Concern is often raised about lack of communication between different practitioners. Many patients do consult CAM practitioners without telling their doctor with possible detrimental effects on their healthcare. The opposite is also true that many orthodox doctors do not talk and discuss their case with CAM practitioners. This has been clearly seen with the use of St John's wort and its interaction with many drugs including oestrogens and antiepileptics. Greater cooperation and respect between orthodox and complementary practitioners would improve communication with patients [8]. With this in mind encouragement must be made to all practitioners to open up lines of communication. In formal integrated clinics, multidisciplinary team meetings can be encouraged; joint patient held notes may be useful, or a cooperation card that is patient held is another way to promote communication as is done at The Poundbury Clinic.

In planning patients' treatment, one needs to develop a simple logical approach. The acronym 'DR O AID' is useful. Initially an adequate Diagnosis is required. Following this one needs to Review the different treatment Options that are available with the patient. This may include both complementary and orthodox. Once an Agreement has been reached this treatment needs to be Implemented and following this Demonstrations about its effect is required.

Practical applications

It is with this background that there is increasing evidence that we need to develop an integrated approach to healthcare. Both obstetrics and gynaecology are ideally suited to this approach and we need to be at the forefront of this exciting area. We must not bury our heads in the sand and follow the same path of Decca recording company who in 1962 rejected The Beatles saying, 'we do not like the sound and guitar music is on its way out!'

There are several areas that can be specifically addressed in obstetrics and gynaecology but I will mention just a few below.

Menopause

By treating women going through the menopause in an integrated way we can offer women a range of choices both self help and professional, complementary and orthodox, incorporating a regime of lifestyle changes, diet and appropriate therapeutic agents [9]. Many areas need to be addressed. Diet is very important and it is accepted that dietary interventions need to start as early as possible even in teenage years. Correct fats in the diet are essential and there is good evidence that a reduction in saturated fatty acids helps reduce coronary heart disease $[10^{\bullet \bullet}]$. There is increasing evidence of the benefit of long chain omega-3 fatty acids in health. Epidemiological studies have demonstrated that high intake of fruits and vegetables may reduce the risk of chronic disease and this may be due to their antioxidant effects. Probiotics, 'live microbial feed supplements which beneficially affects the host animal by improving its intestinal balance', are beneficial. The best studied probiotics are Lactobacillus spp. and Bifidobacterium spp. There is increasing evidence that they can help irritable bowel syndromes and recurrent candida infections as well as urinary tract infection in menopausal women.

Nutrition plays an essential role in the prevention of bone loss and maintenance of bone mass. Most studies have shown that about 1.5 g of elemental calcium is necessary to preserve bone health in postmenopausal women. Vitamin D alone also appears to reduce the risk of vertebral and nonvertebral fracture.

Exercise is essential. Exercise has been demonstrated to help many of the complaints that hormone replacement therapy can, without the potential side effects. Regular exercise helps reduce the risk of osteoporosis and prevent coronary heart disease and type 2 diabetes mellitus. Physical activity can improve mood, urinary incontinence, hot flushes and insomnia. Carefully structured exercise regimes can also be beneficial in the management of established osteoporosis, mainly related to increased well being, muscle strength and postural stability.

Evidence from randomized trials that CAM therapy improves menopausal symptoms are limited. Phytooestrogens are plant substances that have similar effects to oestrogens. Populations that eat a diet high in phytooestrogens do appear to show a reduction in the rate of vasomotor symptoms, cardiovascular disease, osteoporosis, breast, colon endometrial and ovarian cancers. Studies looking at the benefits and potential risks of these products on western populations are in progress.

Herbal remedies are often used for menopausal symptoms. Placebo-controlled studies on black cohosh (Actaea racemosa) are promising but we do need to know more about potential long-term safety and toxicity.

Other CAM therapies that may help hot flushes include reflexology and acupuncture although evidence from published trials is limited.

Infertility

There is evidence in the literature that the development of a fit-for-fertility programme can have a positive effect on fertility [11°]. This would address a lifestyle programme including diet, exercise, stress management and education. Weight is known to have an effect on fertility both in the patient who is overweight, often associated with polycystic ovary syndrome, or is underweight. Drugs such as cocaine, alcohol and caffeine may contribute to subtypes of infertility [12].

Animal work has demonstrated the effect of stress and fertility. There is increasing evidence that stress can have a profound effect on the human hypothalamic pituitary gonadal axis. CAM therapies including aromatherapy and reflexology may only be stress relieving techniques at a minimum but this in its own right can have a positive effect.

There is increasing evidence of the role of acupuncture in infertility. Steiner-Victorin [13] demonstrated that repeated electro-acupuncture increased the ovulation rate and biochemical markers were improved in patients with polycystic ovaries. Paulus et al. [14] investigated the role of acupuncture in embryo transfer. It was not a controlled study but a higher pregnancy rate appeared to be achieved with acupuncture.

Pregnancy

An integrated approach towards pregnancy is nothing new. In the 1970s Smithells et al. [15] first noted the relationship between a diet, social class and congenital malformations. It was not until the early 1990s that the Department of Health Expert Advisory Group recommended that women with a history of neural tube defects should take 4 mg of folic acid preconceptionally and for the first 8 weeks of pregnancy. To prevent the first occurrence of a neural tube defect women were advised to take 400 µg preconceptionally.

Pain relief in labour and delivery is well recognized at providing an integrated approach. Grantly Dick Read in 1933 indicated he could diminish pain by familiarizing the mother with the process of childbirth by creating an atmosphere of confidence. This was developed further in 1951 by Fernand Lamaze who encouraged focus breathing to block pain. Leboyer's birth without violence, which was introduced in the early 1970s, was inspired by Indian Yoga.

Other therapies include hypnosis, Yoga and music therapy, which in certain studies appear to provide

benefit with reduced analgesia. In the *Cochrane Database* review of pain relief it was concluded that acupuncture and hypnosis may be beneficial for the management of pain during labour [16]. Few complementary therapies have been subjected to proper scientific study, however, and the number of women in each study is small. The Cochrane review also concluded that there was evidence that water immersion during the first stage of labour reduces the use of analgesia and reported maternal pain, without adverse outcomes on labour duration, operative delivery or neonatal outcomes.

Intracutaneous injections of sterile water in the lumbosacral region may be useful in reducing the use of conventional analgesia [17]. Evidence for acupuncture for pain relief is encouraging but studies are limited. Different techniques and sites are used and studies have a lack of randomization and adequate controls. Transcutaneous electrical nerve stimulation, widely used for pain relief, has limited evidence of benefit.

Conclusion

In summary there is increasing need for an integrated approach to healthcare. The Berlin Wall between complementary medicine and conventional medicine needs to be removed. Obstetricians and gynaecologists need to be aware that a significant number of their patients are using CAM and should have the ability to discuss these therapies with them as openly as possible.

Although CAM may lack randomized controlled trial studies we have to be transparent and admit that a lot of what we already do in orthodox medicine also lacks evidence. We must have an open mind and cannot ignore the fact that nearly 40% of our patients use some form of CAM. It is important to ask about self medication and CAM therapy and be very careful about polypharmacy.

Good communication is essential. Proper studies need to be encouraged and remember that the lack of evidence of effect does not equal evidence of lack of effect. Statutory regulatory authorities do need to be established and more education needs to be provided to doctors, other health professionals and students to familiarize them with the core CAM therapies. In the Smallwood report 2005, it was concluded that the weight of evidence suggests that CAM could play a much larger role in the delivery of healthcare and help fill recognized effectiveness gaps in

healthcare provision. Choice is a politically correct word at this moment in time. We must offer our patients choices of treatment options, give them accurate information about their choices, help guide the patient through the choices on offer and help the patient decide what is the best choice for them.

References and recommended reading

Papers of particular interest, published within the annual period of review, have been highlighted as:

- of special interest
- of outstanding interest

Additional references related to this topic can also be found in the Current World Literature section in this issue (p. 673).

- Chez RA, Jonas WB. Complementary and Alternative Medicine Part II: clinical studies and gynaecology. Obstet Gynaecol Surv 1997; 52:709–716.
- 2 Thomson A. A healthy partnership. Integrating complementary healthcare into primary care. London: The Prince of Wales's Foundation for Integrated Health 2005.
- 3 Allaine AD, Moos MK, Wells SR. Complementary and alternative medicine in pregnancy: a survey of North Carolina certified nurse midwives. Obstet Gynecol 2000; 95:19-23.
- 4 Tournaire M. Alternative approaches to pain relief during labour and delivery. In: Cooper E, Yamaguchi N, editors. Complementary and alternative approaches to biomedicine. Oxford: Oxford University Press; 2004. pp. 193–206.
- Paterson C, Dieppe P. Characteristic and incidental (placebo) effects in complex interactions such as placebo. BMJ 2004; 300:1202– 1205.
- Smallwood C. Role of complementary and alternative medicine in the NHS.
 London: FreshMinds; 2005.

This looks at the cost-effectiveness of CAM.

- 7 World Health Organisation. WHO Guidelines on safety monitoring of herbal medicines in pharmacovigilance systems. Geneva: WHO; 2004.
- 8 Mills SJ. Regulation in complementary and alternative medicine. BMJ 2001; 322:158–160
- 9 Dooley M, Stacey S. Your change your choice. London: Hodder & Stoughton; 2004.
- Rees M, Purdie D, editors. Management of the menopause. The Handbook.
 4th ed. London: RSM Press Ltd; 2006.

This is a very good handbook on the menopause.

- 11 Dooley M. Fit for fertility. London: Hodder & Stoughton; 2006.
- This follows an integrated approach to infertility.
- 12 Silva PD, Cool JL, Olson KL. Impact of lifestyle on infertility. J Reprod Med 1999; 44:288–296.
- 13 Steiner-Victorin E, Waldenstrom U, Tagnforsll U, et al. Effect of electro-acupuncture on anovulation in women with polycystic ovary syndrome. Acta Obstet Gynecol Scand 2000; 79:180–188.
- 14 Paulus WE, Zhang M, Strehler E, et al. Influence of acupuncture on the pregnancy rate in patients who undergo assisted reproduction therapy. Fertil Steril 2002; 77:721-744.
- 15 Smithells RW, Sheppard S, Schorah CJ. Vitamin deficiencies and neural tube defects. Arch Dis Child 1976; 51:944–950.
- 16 Smith CA, Collins CT, Cyna AM, Crowther CA. Complementary and alternative therapies for pain management in labour. Cochrane Database Syst Rev 2003; (2):CD003521.
- 17 Huntley AL, Thompson Coon J, Ernst E. Complementary and alternative medicine for labour pain: a systematic review. Am J Obstet Gynecol 2004; 191:36-44.