



Topical and oral CAM in acne: A review of the empirical evidence and a consideration of its context

P.J Magin^{a,*}, J Adams^b, C.D Pond^a, W Smith^b

^a Discipline of General Practice, Newbolds Building, School of Medical Practice and Population Health, Faculty of Health, University of Newcastle, University Drive, Callaghan, NSW, Australia

^b Centre for Clinical Epidemiology and Biostatistics, School of Medical Practice and Population Health, Faculty of Health, University of Newcastle, Australia

Available online 15 December 2005

Summary

Introduction: Acne is one of the commonest diseases to afflict humanity. Anecdotally, the use of CAM in acne is widespread. In this review the empirical evidence for the efficacy of CAM modalities is examined and the context for their use discussed.

Methods: Searches were made of the MEDLINE, EMBASE, AMED (Allied and Complementary Medicines), Cochrane, and DARE databases using the search terms ‘acne’ and ‘acne vulgaris’ together with ‘alternative’ and ‘complementary’.

Results: The identified studies examined a broad range of CAM modalities but were of generally poor methodological quality. Evidence suggests that many of these therapies are biologically plausible.

Discussion and conclusion: Complementary therapies in acne should be viewed in a wider context than that of the very limited empiric evidence base that exists for their use. Further rigorously conducted trials should be conducted to define efficacy and adverse effect profiles of currently used CAM acne therapies.

© 2005 Elsevier Ltd. All rights reserved.

Introduction

Acne is ‘one of the commonest diseases to afflict humanity’.¹ At age 16–18, the point prevalence of acne in Australian school students is 93.3%.² Over-

all prevalence in adolescents has been found to be 23–85%.^{2–4}

The use of complementary and alternative medicines (CAM)^a is also exceedingly common in

* Corresponding author. Tel.: +61 249 686 734; fax: +61 249 686 727.

E-mail address: parker.magin@newcastle.edu.au (P.J Magin).

^a Complementary and Alternative Medicine (CAM) as used in this paper refers to ‘a group of diverse medical and health care systems, practices and products that are not presently considered to be part of conventional medicine’ (National Centre for Complementary and Alternative Medicine 2002).

Australia, the US, Europe and other countries. It is estimated that Australians currently spend over \$AUD2.3b on CAM annually and the annual expenditure for the US population has been estimated at \$US34b.⁵ Furthermore, the prevalence of CAM use is increasing⁶ and, of especial relevance to acne, the age at first use of CAM is decreasing.⁷ Also of note is that 49% of CAM users in a United States study used only self-directed CAM products and practices⁸ and, in another study, more than twice as many people used CAM therapies as attended a CAM practitioner.⁶

In the United States 6.7% of people who reported having skin diseases in the past 12 months reported that they had used alternative therapy and 2.2% saw an alternative practitioner for their condition.⁶ With regard to acne, there is no specific data available on prevalence of use of CAM. A systematic review of CAM usage in dermatological patients⁹ found studies examining the use of CAM in psoriasis, atopic eczema, melanoma and unselected dermatological outpatients, but not in patients with acne. While there is no data regarding prevalence of usage, a large number of CAM therapies have been advocated for use in acne or were noted to be used in treatment of acne. These are listed in Table 1.

In this review we present the evidence for efficacy of topical and oral CAM in the therapy of acne. Also examined is empiric evidence pursuant to the context of acne therapy with these CAM modalities—evidence for CAM effects upon the known aetiological factors in acne, and for adverse effects of CAM acne therapies. Other CAM therapies such as acupuncture, skin pricking, cupping and bloodletting which have been advocated in the treatment of acne are not addressed in this review.

Methods

Searches were made of the MEDLINE, EMBASE, AMED (Allied and Complementary Medicines), Cochrane, and DARE databases using the search terms "acne" and "acne vulgaris" together with "alternative" and "complementary". Initial findings directed further searches using the terms herbal, essential oil, homeopathy, aromatherapy, and naturopathy. Only English language articles were accessed. The reference lists of identified articles were hand-searched for further relevant studies. A total of 23 articles were retrieved. Methodological information was extracted from each study and was utilised in evaluation of the study concerned. But in view of the small number of empiric studies of the efficacy

Table 1 Advocated CAM acne therapies

Topical essential oils/aromatherapy
Chamomile/ <i>Matricaria recutita</i>
Geranium/ <i>Pelargonium asperum</i>
Rosemary/ <i>Rosemarinus officinalis</i> and rosemary verbenone/ <i>Rosemarinus officinalis</i> verbenone
Lemon/ <i>Citrus limon</i>
Sandalwood/ <i>Santalum album</i> and <i>S. spicatum</i>
Orange/ <i>Citrus aurantium</i>
Thyme linalool
Lavender
Australian eucalyptus/ <i>Eucalyptus radiata</i>
Tea tree/ <i>Maleleuca alternifolia</i>
Petitgrain/ <i>Citrus aurantium</i> var <i>amara</i> fol
Juniper twig/ <i>Juniperus communis</i> ram
<i>Lavandula angustifolia</i> and <i>L. spicula</i>
<i>Ormenis Mixta</i> flos
Patchouli/ <i>Pogostemon cablin</i>
<i>Eucalyptus dives</i>
<i>Chamamelum nobile</i>
<i>Achillea millefolium</i>
Safflower oil, Linoleic acid
Sunflower oil, Linoleic acid
<i>Taraxacum officinale</i>
Rose water
Basil/ <i>Ocimum sanctum</i> , <i>O. basilicum</i> and <i>O. gratissimum</i>
Benzoin/ <i>Styrax benzoe</i>
Black cummin/ <i>Nigella sativa</i>
Lemon grass/ <i>Cymbopogon citratus</i>
Bay
Topical plants/herbs
Compositae/ <i>Artemesia vulgaris</i> and <i>A. absinthum</i>
Pea/ <i>Pisum sativum</i>
Pumpkin/ <i>Cucurbita pepo</i>
Onion/ <i>Allium cepa</i>
Witch hazel/ <i>Hamamelis virginiana</i>
Oregon grape root/ <i>Mahonia aquifolia</i> /berberine
Oak bark
English walnut
Fresh lemon
<i>Ternialia arjuna</i>
<i>Veronia antihelminthica</i>
Garlic/ <i>Allium sativum</i>
Cucumber
Vinegar
<i>Aloe vera</i>
<i>Kramiria triandra</i> Ruiz plus escin-beta-sitosterol plus lauric acid
Fruit acids (citric, gluconic, gluconolactone, glycolic, malic, or tartaric)
<i>Vitex/Vitex agnus-castus</i>
Duckweed/ <i>Lemna minor</i>
Bittersweet nightshade/ <i>Solanum dulcamara</i>
Borage/ <i>Borago officinalis</i>
Pomegranate/ <i>Punica granatum</i>
Rue/ <i>Ruta graveolens</i>

Download English Version:

<https://daneshyari.com/en/article/2629409>

Download Persian Version:

<https://daneshyari.com/article/2629409>

[Daneshyari.com](https://daneshyari.com)