

Complementary Medicines:

An Overview

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Introduction



- ❑ Complementary medicines (CMs) are being used by an increasing number of patients worldwide
 - ❑ Australians spend \$1.2 billion annually on CMs
 - ❑ In 1997 Americans spent over \$27 billion on CMs
 - ❑ In Australia CMs range from government registered products to completely uncontrolled products
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Definitions



- CAM
 - CM
 - CMs can be defined as
 - any non-prescription medicine, including nutritional supplements or “herbal” preparations
 - purchased from a
 - supermarket,
 - health store,
 - over-the-counter from a pharmacy,
 - naturopath,
 - homeopath,
 - herbalist,
 - mail order,
 - over the internet,
 - grown at home.
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Issues



- ❑ Therapeutic effects
 - ❑ Drug-drug interactions
 - ❑ Drug-disease interactions
 - ❑ Adverse reactions
 - Garlic (Stevinson et al, Ann Intern Med 2000) – bleeding...
 - St John's Wort (Reactions, 2000) – fatalities...
 - Echinacea – allergy and liver toxicity...
 - Licorice – increase K – arrhythmias...
 - Black cohosh – fatalities...
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ADRs



- Adulteration
 - Pan Pharmaceuticals
 - Toxicity
 - germander and weight control: 30 fatalities (liver toxicity)
 - Mutagenicity
 - Allergic reactions
 - Royal jelly
 - Drug-CM interereactions
 - Multiple ingredients
 - Disease-CM interactions
 - Diabetes, CV
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The question



- EBM or not!!!
- Choices

ELECTRO-COLLOIDAL SILVER

*Safely STOPS
internal & external
infections*

Bronchitis
Burns & Bites
Colds & Flu
Ear/Eye Infection
Food poisoning
Gonorrhea
Herpies
Meningitis
Pink eye
Pneumonia
Pyorrhea
Ringworm
Shingles
Staph & Strep
Tonsillitis
Tuberculosis
..and 100's of others
No taste, smell, or sting!



4 OZ BOTTLE

**Kills bacteria on contact!
The BEST colloidal silver!**

Silver Solution™

A Total of 5 Fluid Ounces

\$29.95

plus \$4 Shipping & Handling
Visa, MCard, Discover or AmEx accepted
C.O.D. available.
Satisfaction Guaranteed Moneyback



1 oz SPRAY

FREE

*With Your Order
1 oz Silver Solution™
In a pump spray bottle. \$9.95 value
Plus, FREE 18 page instructional booklet.
Offer ends soon!*

<http://www.quackwatch.org/index.html>

Problematic



- ❑ Little evidence for colloidal silver products
 - ❑ The risk to consumers of silver toxicity outweighs the value of trying an unsubstantiated treatment
 - ❑ Bacterial resistance to silver can occur
 - ❑ Efforts should be made to curb the illegal availability of colloidal silver products, which is a significant public health issue
 - ❑ FDA and TGA warning...
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EBM ???



- “there cannot be two kinds of medicine – conventional and alternative. There is only medicine that has been adequately tested and medicine that has not, medicine that works and medicines that may or may not work”
 - Angell and Kassirer
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??Patient choice



- Placebo effect.....
 - Education
 - We need the patient to inform us to that we can make informed treatment decisions
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Levels of usage



- ❑ Disparity of definitions
 - ❑ Worldwide utilisation rates vary from as low as 10% to over 50%
 - ❑ Australian studies report levels up to 50%
 - ❑ A recent study in Australia, surveyed 511 inpatients at a tertiary referral teaching hospital – 12% were taking 156 CMs at the time
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Levels of usage (cont)



- St Vincent's Hospital, Sydney
 - 12% overall usage of CMs
 - 41% were consuming without their health care providers knowledge
 - One third were being consumed in hospital without being recorded on the medication chart
 - 18% of patients were taking CMs that potentially interacted with their prescribed medicines
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Geriatrics



- FDS 25% in an elderly population
 - Co-morbidities
 - Poly-prescribing
 - Financial constraints
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It isn't just about the MAJOR effects –
CMs may necessitate extra monitoring in
some patients:

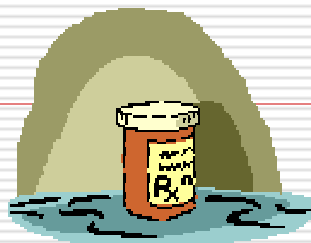


CM

- Fish Oil/omega-3 fatty acids

Monitoring

- INR
- Glycaemic control
- Cholesterol/Tg levels
- Vitamin A and D levels



CMs requiring extra monitoring:



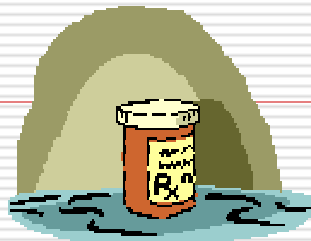
CM

Garlic

Monitoring

INR

BP



What about warfarin?



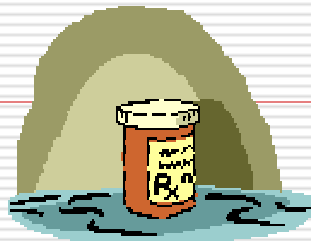
- Known to interact with over 200 different drugs!
- Nutritional supplements – vitamin K, vitamin C and co-enzyme Q10, vitamin E
 - Some strongly supported – some conflicting
- Herbals
 - Garlic, dong quai, devil's claw – increase in INR
 - Ginseng, green tea, St John's wort – decrease in INR
 - Some strongly supported – some conflicting



What about warfarin?

Education.....

- Patients need to inform us if they are on warfarin AND
- Patients need to inform us if they start ANYTHING NEW – included nutritional, dietary, herbal etc



Role of the health care professional



- Careful and persistent questioning is essential
 - Many patients do not view CMs as medicines
 - Many patients believe that CMs are not harmful
 - GP communication/specialist communication
 - Different ethnic groups incorporate CMs for different reasons
 - We need to educate patients and other health care professionals
 - Medico-legal issues....
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Developing an expertise



- Paucity of high-quality scientific literature on CMs
 - Pharmacists have developed an expertise in these searches to determine actual and potential adverse effects
 - Consult you hospital drug information centre for more information if you are unsure
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Complementary Medicines Sites



- [Longwood Herbal Taskforce](#)
 - [Bandolier Complementary and Alternative Therapies](#)
 - [HerbMed](#)
 - [HerbaLinks from the University of Iowa Drug Information Service](#)
 - [US Pharmacist](#)
 - For information on complementary cancer remedies try the [US National Cancer Institute](#) for concise fact sheets or [in depth information summaries](#) on a number of such remedies.
 - [Quackwatch](#) site also has useful information about complementary (and questionable) cancer treatments as does the
 - [Memorial Sloan Kettering Cancer Center](#)
 - [Cochrane](#)
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Case



- 75 yo male
 - Diabetes 10 years
 - Hypertension
 - Renal impairment
 - Abnormal finding
 - Hyperkalaemia despite being stabilised on all his medications for 6 months
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“What prescription medications do you take?”



□ Medications

- Aspirin 100mg /day
 - Metformin 500mg tds
 - Ramipril 10mg m
 - Frusemide 40mg m
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“Do you take any other over the counter medicines or medicines that you buy yourself from a pharmacy?”

“Occasional panadol for pain”



“Do you take any other herbal products....”

- No – don't believe in that stuff



“Do you take anything else that you buy from a health food store?”

No



His wife attends....and you ask her the same questions...but she happens to mention...



- "oh - we have been using that diabetes juice that we buy on the computer by mail order; one of our friends told us about it - so all our diabetic friends are having this with breakfast!"



Primitive peer pressure

Noni juice



- Large amounts of potassium
 - High levels of sugar
 - Ceased and the potassium returned to normal
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In Summary...



- Elucidation of CM usage can prevent serious harm to your patient
 - Health care professionals need to become the experts in this area to provide informed scientific advice
 - Research into CMs is paramount to determine their place in therapy
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Treating your patient without knowing their full medication history is a bit like this.....

