Complementary Therapy Use in Men with Prostate Cancer

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No disclosures
What is complementary therapy?
Complementary therapy

From Wikipedia:

• Also called integrative medicine
• Designed to be used *in conjunction* with standard medical treatment
• Includes Complementary and Alternative Medicine (CAM)
  – Takes into account the “whole” person
Types of complementary therapy

- Acupuncture
- Yoga
- Chiropractic medicine
- Energy therapy
- Magnetic field therapy
- Reiki
- Healing touch
- Herbal medicine
- Ayurvedic medicine
- Massage therapy
- Hydrotherapy
- Juice therapy
- Sound/music therapy
- Aromatherapy
- Reflexology
- Homeopathy
- Iridology
- Frequency healing
Do American patients use CAM?

• Survey studies show that
  – 40% of adults use some form of CAM
  – 2012 study 38% adults and 12% children using one or more CAM modalities
  – Supplements used by 18% of US population
  – Most prevalent mind-body practices
    • Relaxation therapy
    • Meditation
    • Chiropractic therapy
    • Massage
What does this cost?

- 59 million Americans spend $30.2 billion per year
- Represents 10% of all health care spending
- Insurance only partially covers chiropractic care, acupuncture and massage
Why do people use CAM?

Reasons to use CAM

- Conventional medicine too expensive (13%)
- Conventional practitioner suggested it (26%)
- Believe conventional medicine will not help (27%)
- Thought it would be interesting to try (50%)
- Believe CAM will improve outcomes of traditional medicine (55%)
What about men with prostate cancer: Why might they use CAM?

• Looking at men undergoing active surveillance
  – The good news:
    • Your cancer is early
    • Your cancer is not aggressive
    • You don’t need treatment now and may never need treatment
    • We will monitor you carefully and treat you should your cancer become more aggressive
What about men with prostate cancer: Why might they use CAM?

• The unsettling news
  – Wait, I have cancer and you are not going to treat it?
  – Are you absolutely certain that active surveillance is safe?
  – I am worried that my cancer will progress and that the progression may be missed.
  – I am worried that my cancer won’t be curable if it progresses.
Active surveillance and mental health

- Men who elect active surveillance understand that treatment for their cancer may be both unnecessary and associated with harmful side effects, such as decreased erections and undesirable changes in bladder function.

- However, studies show that active surveillance is associated with increased depression and anxiety in some men.
Who might experience increased worry and depression on active surveillance?

- Men with pre-diagnosis anxiety, depression or neuroticism
- Divorced men
- Men with a relative who had prostate cancer (particularly if the relative did not do well)
- Men with bladder problems
- Men who don’t trust their doctors or who feel their doctors are not empathetic
- Men who have other health problems
Bottom line on a complex literature

• The choice to undergo AS is complex
• Not all patients are at peace with AS
• For some patients, fear and anxiety are associated with AS
• Patients want empathy from their doctors
• Care providers should be vigilant regarding the mental health of their patients
• More research on mental health during AS is needed

Rittenmeyer 2017
Can CAM help those patients who are worried or depressed during AS for their prostate cancer?
Are there studies of CAM?

• Yes!

• What has been studied?
  – Green tea, broccoli, tumeric
  – Mind-body therapies
  – Lifestyle change
Supplements

• British study looking at "polyphenol-rich" supplements (capsule containing pomegranate, green tea, broccoli and tumeric)

• 199 men, average age 74

• All undergoing active surveillance

• Coin flip study: ½ got supplement, ½ didn’t

R Thomas 2014
What did the study show?

Average Change in PSA at 6 months

Men who took supplement  Mend who didn't take supplement
What does this mean?

• It means in this small study, men who took the capsule had less PSA increase at 6 months than those who didn’t take the capsule.

• Is this proof that supplements work?
  – Unfortunately no. Proof that an intervention works takes studies that look at thousands of patients.

• Should I take these supplements anyway?
  – Large studies of supplements have mixed results in other diseases
  – However, many doctors would encourage you to eat broccoli, drink pomegranate juice, definitely to drink green tea and turmeric in small doses can’t hurt
  – Most patients never tell their doctors that they are taking supplements. This is a bad idea. Discuss your supplements with your doctor so he or she can monitor you for both benefits and side effects
What other supplements have been looked at?

<table>
<thead>
<tr>
<th>Study</th>
<th>Supplement</th>
<th>No of Patients</th>
<th>Benefit?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hollis 2013</td>
<td>Vit D</td>
<td>52</td>
<td>55% decrease in number of + biopsy cores at 1yr</td>
</tr>
<tr>
<td>Magbanua 2011</td>
<td>Fish oil Lycopene (tomato)</td>
<td>84</td>
<td>No change in gene expression</td>
</tr>
<tr>
<td>Stratton 2010</td>
<td>Selenium</td>
<td>140 (PRT)</td>
<td>No improvement in rise of PSA</td>
</tr>
<tr>
<td>deVere White 2010</td>
<td>Soy</td>
<td>53 (PRT)</td>
<td>No difference in PSA at 3, 6, 12 mos</td>
</tr>
</tbody>
</table>

Selenium actually appeared harmful! Again, a great diet may be better than supplements. The vitamin D study looks promising but the number of studied patients is too small!!
Mind-Body Therapy

- Mind-body therapies teach the patient to relax, to focus and to push away negative thoughts

- The main three types are:
  - Meditation
  - Evoking the relaxation response
  - Cognitive behavioral therapy
Are mind-body therapies helpful?

- Of all studied CAM therapies, these may be the best
- They have the advantage of having no adverse side effects!
- But they require discipline and training
- And the lessons to learn mind-body treatment is not covered by insurance
### What do the studies show?

<table>
<thead>
<tr>
<th>Study</th>
<th>No of Patients</th>
<th>Method studied</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yanez 2015</td>
<td>71</td>
<td>Relaxation response</td>
<td>Most helpful for patients with poor coping skills</td>
</tr>
<tr>
<td>Victorson 2016</td>
<td>43</td>
<td>Mindfulness vs. standard care</td>
<td>Better coping and decreased anxiety in mindfulness group</td>
</tr>
</tbody>
</table>
And finally, what about exercise and lifestyle?

- Exercise has been shown to be beneficial in almost every study in every disease.
- The word “exercise” can mean many different kinds of physical activity.
- The term “lifestyle” generally means diet.
- No-one agrees on exactly what constitutes a healthy diet although everyone agrees that refined sugar and unhealthy fats should be avoided.
# Results of lifestyle programs

<table>
<thead>
<tr>
<th>Study</th>
<th>No of Patients</th>
<th>Intervention</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Omish 2005</td>
<td>93 PRT</td>
<td>Vegan diet, exercise, stress management x 12 months</td>
<td>Decreased: Cholesterol, PSA, PC cell growth from serum</td>
</tr>
<tr>
<td>Frattaroli 2008</td>
<td>92 PRT</td>
<td>Vegan diet, exercise, stress management x 12 months</td>
<td>Decreased cholesterol and need for prostate cancer treatment</td>
</tr>
<tr>
<td>Ornish 2013</td>
<td>35 pilot study</td>
<td>Diet, exercise, stress management and social support x 3 months</td>
<td>Pts lost weight, lowered cholesterol, improved mental status and decreased telomere length</td>
</tr>
</tbody>
</table>
CAM for prostate cancer patients undergoing AS

- Why don’t we have definitive results?
  - These studies are incredibly expensive to do
  - Funding is hard to find
  - Other studies take priority
  - Not many funders want to study CAM
  - CAM interventions (other than supplements) take work on the part of the patient who may be otherwise busy, tired or ill
Is there good news?

• Absolutely!
• Buried in these small, underpowered studies looking at CAM interventions in different ways, there is an undercurrent of positivity!
• Trends suggest that patients can help themselves be healthier and feel better!
Is there good news?

• What do we recommend?
  – A reasonable diet
  – Regular exercise mixing aerobic therapy with weight lifting
  – Mind-body interventions
    • If working with a practitioner is too expensive, look online for meditation exercises or CDs from CAM centers
  – Ask your doctor if you want to take supplements
Bottom line

• Improving your overall physical and mental health is always a good thing
• CAM therapies can help with these goals!
• There is indirect evidence that these improvements may help with your prostate cancer but the evidence is still early
• Many large hospitals have CAM centers, look to them for advice!