Complementary Therapy

Survivorship
Complementary Therapy – Hormonal Treatment and Alternatives in Breast Cancer Survivors – Survivorship

Version 2002–2014:
Albert / Bauerfeind / Blohmer / Fersis / Friedrich / Gerber / Göhring / Hanf / Janni / Kümmel / von Minckwitz / Oberhoff / Scharl / Schmidt / Schütz / Thomssen

Version 2015:
Hanf / Kümmel
In addition to scientifically based medicine

Instead of scientifically based medicine

Unproven outsider methods
General considerations

- Alternative methods (CAM) instead of surgical treatment
- Alternative methods (CAM) instead of systemic treatment
- While on anti-cancer treatment: beware of drug interactions
Complementary Therapy
Pre- and Postoperative

Preoperative:

- Hypnosis (reduces anxiety, pain, fatigue, nausea)  
  LoE/B: 1b B +

Postoperative:

- Acupuncture (pain relief)  
  LoE/B: 2b B +/-
- Acupuncture (nausea, vomiting)  
  LoE/B: 2b B +
- Early postop. exercise reduces upper-limb dysfunction (beware: increased wound drainage)  
  LoE/B: 1a A +
- Prophylactic lymph drainage  
  LoE/B: 1b B -
Complementary Treatment
Impact on Toxicity I

While on anti-cancer treatment: beware of drug interactions

- **Mistletoe** (*Viscum album*) in order to reduce side effects (influence on efficacy of anti-tumor therapy unknown)
- **Thymic peptides** (lowered risk of severe infections) (influence on efficacy of anti-tumor therapy unknown)
- **Ginseng** (in order to reduce cancer related fatigue) (note: ginseng inhibits cytochrome P enzymes e.g. CYP 3A4)
- **Ganoderma Lucidum**

- **L-Carnitine** (given for prevention of toxicity, increased chemotherapy induced peripheral neuropathy)
- **L-Carnitine does not improve cancer rel. fatigue**

- **Curcumin** as an adjunct to reduce radio dermatitis
- **Ginger** for chemotherapy induced nausea & vomiting (consider interaction with anti-tumor drugs)
### Complementary Treatment Impact on Toxicity II

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<thead>
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<th>Complementary Treatment</th>
<th>Oxford / AGO</th>
<th>LoE / GR</th>
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<tr>
<td>Antioxidant supplements</td>
<td>1b</td>
<td>B</td>
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<tr>
<td>High dose vitamine C</td>
<td>1b</td>
<td>C</td>
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<tr>
<td>Vitamine E</td>
<td>2b</td>
<td>D</td>
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<tr>
<td>Selenium for alleviating side effects of therapy</td>
<td>1b</td>
<td>B</td>
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<tr>
<td>Co-Enzyme Q 10 (fatigue, QoL)</td>
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<tr>
<td>Proteolytic enzymes in order to reduce chemotherapy-induced toxicity</td>
<td>3b</td>
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<tr>
<td>Chinese herbal medicine improves wound healing after mastectomy</td>
<td>1b</td>
<td>B</td>
</tr>
<tr>
<td>Oxygen and ozone therapy</td>
<td>5</td>
<td>D</td>
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</tbody>
</table>

*inf: i.v.-infusion (in Germany not approved)
Additional Complementary Therapy
Side Effects Related to Cancer Treatments
e.g. Chemotherapy

- Chinese medicinal herbs to treat the side effects of chemotherapy in breast cancer patients
  - May offer some benefit to breast cancer patients in terms of bone marrow improvement and quality of life

- Homoeopathic medicines for adverse effects of cancer treatments
  - Topical calendula (>= 20% Calendula amount) for prophylaxis of acute dermatitis during radiotherapy
  - Traumeel S mouthwash to treat chemotherapy-induced stomatitis

- Topical Silymarin for prophylaxis of acute dermatitis during radiotherapy

- Acupuncture in order to improve on
  - Chemotherapy-induced >=nausea and vomiting
  - Cognitive dysfunction
  - Fatigue
  - Pain
  - Leucopenia

Oxford AGO LoE / GR

- 1b B -
- 1b B +/-
- 3a B +/-
- 1a B +
- 5 D +/-
- 1a B +/-
- 1a B +/-
- 2b B -
MBSR (Mindfulness-Based Stress Reduction) Programme improves quality of life, coping strategies, attentiveness, lowers stress and depressive syndromes)

Physical exercise / sport
min. 150 min. moderate endurance training per week in combination with work out exercises (2x per week) improve quality of life, cardio-respirat. fitness, physical performance and fatigue, no higher risk of lymphedema
Complementary Treatment
Mind-Body Medicine II

- **Yoga**
  - Improves sleep, quality of life, stress, anxiety, depression
  - Improves fatigue

- **Qi Gong**
  - May improve quality of life, fatigue, mood

- **Tai Chi**
  - Improves quality of life, physical performance

- **Hypnosis (in combination with cognitive training)**
  - Improves fatigue and muscle weakness under radiation therapy, also reduces distress

Oxford / AGO LoE / GR

- Yoga: 1b A +
  - +/−

- Qi Gong: 2a B +/−

- Tai Chi: 2a B +/−

- Hypnosis: 1b A +
Modifiable Lifestyle Factors
Prevention of Recurrence I

- Physical exercise
  (Equivalents to 3–5 hrs moderate walking per week improves DFS and OS, cardio-respiratory fitness, physical functioning)

- Smoking

- Alcohol consumption (>6 g/day)
Adherence to normal BMI/weight loss if overweight, irrespective of HR-status (improves prognosis – DFS/OS)  

Low fat diet  
(improves prognosis – DFS and OS)  
nutritional counseling recommended,

Avoid high-fat dairy products

Flaxseed/increased fibre intake

Adherence to general nutrition guidelines (e.g. DGE, WCRF)

Dietary extremes  
(are associated with less favourable outcomes)
Complementary Treatment
Prevention of Recurrence III
Dietary Supplements – Herbal Therapies

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Post treatment vitamin/antioxidant supplements doesn't appear to be associated with increased risk of recurrence (beware of drug/treatment interactions)

**Smokers on antioxidant supplements are at higher risk for lung cancer**

- **For Prevention of BC Recurrence:**
  - Antioxidants
  - Orthomolecular substances (Selenium, Zinc...)
  - Vitamine supplementation in pats on a balanced diet (esp. Vit C, E, D)
    - Artificial carotenoids appear to be associated with worse outcome
  - Proteolytic enzymes (Papain, Trypsin, Chymotrypsin)
  - Soy-food (natural source of phytoestrogenes)
    - Concentrates containing ≥ 100 mg isoflavones
  - Black Cohosh (Cimicifuga racemosa)
  - Mistletoe (Viscum album)
  - Thymic peptides (impact on OS)
  - Oxygen- and ozone therapy
  - Antioxidant supplements (after completion of radiotherapy)
  - Laetrile
  - Cancer bush (Sutherlandia frutescens), Devil's claw (Harpagophytum procumbens), Rooibos tea (Aspalathus linearis), Bambara groundnut (Vignea subterranean)

Smokers on antioxidant supplements are at higher risk for lung cancer.
Complementary Treatment
Cancer Pain Reduction

➢ Acupuncture for cancer pain in adults

➢ Transcutaneous electric nerve stimulation (TENS) for cancer pain in adults

➢ Cave: No delay in diagnostic process

Oxford / AGO
LoE / GR

2b D +/-

2b D +/-
Further information:

Screened Data Sources:
Pubmed 2003 - 01/2015
ASCO 2003 – 2014
SABCS 2003 – 2014
EBCC 2003 – 2014
Cochrane library: summary Jan. 2015:

External advice:
The commission wants to thank the following external advisors for their contribution:

2010: Advice on nutritional facts by Prof. Dr. G. Stangl, Martin-Luther-University Halle Wittenberg, Germany
2011+ 2013 + 2015: Prof. Dr. G. Dobos and team,
   Alfried Krupp von Bohlen und Halbach-Stiftungsprofessur für Naturheilkunde an der Universität Duisburg-Essen,
   Klinik für Innere Medizin V, Naturheilkunde und Integrative Medizin

No references
The term „alternative therapies“ has to be more precisely defined. The above scheme divides the subject into two main aspects:

- UCT refers to unconventional therapies with unproven methods; they frequently include outsider methods with possible considerable inherent risks.
- CAM includes both alternative therapies, which are used instead of conventional, scientifically based medicine, and complementary methods, which are used in addition to conventional methods. While conventional clinicians tend to more readily approve of the complementary approach than one of the other options, complementary approaches, if administered simultaneously with conventional therapies, always carry the risk that the treatments unexpectedly interfere with each other to produce untoward effects, i.e., drug interactions with partially incalculable outcomes.

No References
General Considerations (4/14)

No further information

References:

**Complementary Therapy Pre- and Postoperative (5/14)**

*No further information*

**References:**

**Hypnosis**


**Acupuncture and Postoperative Nausea and Vomiting**


Postoperative exercise


Prophylactic lymph drainage

Complementary Treatment. Treatment phase. Impact on Toxicity I (6/14)

No further information

References:

Mistletoe:


**Thymus:**


**Ginseng, Ganoderma lucidum:**


Abstimmungsergebnis der AGO-Empfehlung: einstimmig

**L-Carnitine:**


Abstimmungsergebnis der AGO-Empfehlung: einstimmig
Curcumin:


Abstimmungsergebnis der AGO-Empfehlung: 15/5
No further information

References:

Antioxidant supplements


Vitamin C


Selen


Coenzym Q10


Proteolytic enzymes and toxicity of chemotherapy:

Bromelain


Chinese herbal medicine and wound healing

Additional Complementary Therapy Side Effects Related to Cancer Treatments - e.g. Chemotherapy (8/14)

No further information

References:

Chinese medicinal herbs


Homeopathic medicines for adverse effects of cancer treatments


Topical use of Silymarin

Acupuncture


Chemotherapy-induced Nausea and Vomiting


Cognitive dysfunction

Fatigue


Pain


Leucopenia

Complementary Therapies - Mind-Body-Medicine I (9/14)

No further information

References:

Mind-Body Medicine (MBM)

1. A general overview of mind/body therapies in cancer survivorship


MBSR


Physical exercise


Statement on quality of life


Cardio respiratory Fitness / Physical Functioning


Fatigue


Complementary Therapies - Mind-Body-Medicine II (10/14)

No further information

References:

Yoga


Qigong


Tai Chi


Tai Chi Abstimmungsergebnis der AGO-Empfehlung: 10/7

Hypnosis


Hypnosis: Abstimmungsergebnis der AGO-Empfehlung: 12/9
Modifiable Lifestyle Factors – Nutrition after Breast Cancer Diagnosis – Prevention of Recurrence II (11/14)

No further information

References:

Physical exercise


Improvements in DFS and OS, prevention of recurrence


Smoking


Smoking: Abstimmungsergebnis der AGO-Empfehlung: 10/5


Alcohol


49. Reding et al.: Effect of Prediagnostic Alcohol Consumption on Survival after Breast Cancer in Young women. Cancer Epidemiol Biomarkers Prev. 2008; 17: 1988-1996. These results suggest that women who consume alcohol before a diagnosis of breast cancer have improved survival, which does not appear to be attributable to differences in stage, screening, or treatment.
Modifiable Lifestyle Factors – Nutrition after Breast Cancer Diagnosis – Prevention of Recurrence II (12/14)

No further information

References:

Adherence to normal body weight/BMI:


Avoidance of high fat dairy products:


Lignans/ flaxseed:


Adherence to general nutrition – guidelines:

Complementary Treatment - Prevention of Recurrence III (13/14)

No further information

References:

Post treatment vitamin and/or antioxidant supplements:

Soy as normal part of the diet/soy concentrates:


Black cohosh:


Laetrile treatment for cancer:


St John’s Wort:

Red clover:


Dong Quai:


Ginseng root:


**Bromelain+Papain+Selen+Lektin bei AI-induced athralgia**

Complementary Treatment: Cancer Pain reduction (14/14)

No further information

References:

Acupuncture:


Transcutaneous electric nerve stimulation (TENS) for cancer pain in adults: