

Diagnosis and Treatment of Patients with early and advanced Breast Cancer

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Complementary Therapy Survivorship

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

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- **Versions 2002–2019:**

**Albert / Bauerfeind / Blohmer / Fersis / Friedrich / Gerber / Göhring /
Hanf / Janni / Kümmel / Lück / von Minckwitz / Nitz / Oberhoff /
Rhiem / Scharl / Schmidt / Schütz / Thomssen**

- **Version 2020:**
Kümmel / Schütz

CAM

„Integrative Oncology“

CAM

Complementary + alternative medicine

Complementary

*In addition to
scientifically
based medicine*

Alternative

*Instead of
scientifically
based medicine*

„Unconventional methods“

UCT

Unconventional Tx

Unconventional

*Unproven outsider
methods*

General Considerations

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- **CAM instead of loco-regional interventions**
- **CAM instead of systemic treatment**
- **Patients should be asked and advised about their use of CAM modalities**
- **Diagnostic procedures in connection with complementary and alternative therapy concepts without evidence (e.g. iris diagnostics, bioresonance) should not be recommended.**
- ***During anti-cancer treatment:* Beware of drug interactions**

| Oxford | | |
|--------|----|-----|
| LoE | GR | AGO |
| 2b | B | -- |
| 2b | B | -- |

Complementary Therapy

Pre- and Postoperative

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Preoperative:

- Hypnosis (reduces anxiety, pain, nausea)

Postoperative:

- Acupuncture (pain relief, anxiety)
- Acupuncture (nausea, vomiting)
- Massage therapy (pain relief)
- Early postoperative exercise reduces upper-limb dysfunction (beware: increased wound drainage)
- Physical exercise
to reduce breast cancer related secondary lymphedema
as a prophylaxis of lymph edema
- Prophylactic lymphatic drainage
- Yoga (arm and shoulder pain)
- Music therapy (reduces pain after mastectomy)

| Oxford | | |
|--------|----|-----|
| LoE | GR | AGO |
| 1b | B | + |
| 1b | B | +/- |
| 2b | B | + |
| 2b | C | +/- |
| 1a | A | + |
| 1a | A | + |
| 1b | B | +/- |
| 1b | B | - |
| 2b | C | + |
| 2b | C | +/- |

Complementary Treatment While on Cancer Treatment – Impact on Toxicity I

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During anti-cancer treatment: Beware of drug interactions

- **Mistletoe (*Viscum album*)**
in order to reduce side effects
- **Thymic peptides**
lower risk of severe infections
- **Ginseng**
in order to reduce cancer related fatigue; note: interacts with cytochrome P
enzymes e.g. CYP 3A4
- **Ganoderma Lucidum**
may improve fatigue, note: inhibits cytochrome P
enzymes (e.g. CYP 3A4)
- **L-Carnitine**
 - given for prevention of toxicity; however, increased chemotherapy-induced
peripheral neuropathy
 - Improvement of cancer related fatigue
- **Curcumin**
adjunct to reduce radiation-induced dermatitis
- **Ginger**
adjunct to guideline-oriented medication to treat chemotherapy induced nausea &
vomiting – beware of drug interactions

| Oxford | | |
|--------|----|-----|
| LoE | GR | AGO |
| 1a | B | +/- |
| 2a | B | +/- |
| 2b | C | - |
| 2b | C | - |
| 1b | B | -- |
| 1b | B | - |
| 1b | B | +/- |
| 1b | C | +/- |

Complementary Treatment

While on Cancer Treatment – Impact on Toxicity II

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- **Antioxidant supplements**
→ various antioxidative extracts to reduce anthracyclin-induced cardiotoxicity
- **High dose vitamin C**
- **Vitamine E**
- **Selenium for alleviating therapy side effects**
- **Co-Enzyme Q 10 (fatigue, QoL)**
- **Proteolytic enzymes for reduction of chemotherapy-induced toxicity**
- **Chinese herbal medicine improves wound healing**
- **Oxygen and ozone therapy**
- **Short-term fasting (QoL, Fatigue)**

inf: i.v.-infusion (in Germany not approved)

* **treatment in clinical trials recommended**

| Oxford | | |
|--------|----|-------|
| LoE | GR | AGO |
| 1b | B | - |
| 2b | B | +/- |
| 1b | C | - |
| 2b | D | - |
| 1b | B | - |
| 1b | B | - |
| 3b | B | - |
| 1b | B | -*inf |
| 5 | D | -- |
| 3b | C | +/-* |

Additional Complementary Therapy of Side Effects Related to Cancer Treatments

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| | Oxford | | |
|---|--------|----|-----|
| | LoE | GR | AGO |
| ■ Chinese medicinal herbs to treat the side effects of chemotherapy in breast cancer patients | 1b | B | - |
| ■ Homoeopathic medicine against therapy side effects | 1b | B | +/- |
| <ul style="list-style-type: none"> ■ Topical calendula ($\geq 20\%$ 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 | 3a | B | +/- |
| ■ Massage to improve on fatigue, pain, anxiety, nausea | 1b | C | +/- |
| ■ Transcutaneous Electrical Nerve stimulation (TENS) against cancer pain | 2b | D | +/- |
| ■ Hydrotherapy | 3b | C | +/- |

Additional Complementary Therapy of Side Effects Related to Cancer Treatments

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LEHREN
HEILEN

| | Oxford | | |
|---|--------|----|-----|
| | LoE | GR | AGO |
| Acupuncture in order to improve on | | | |
| ▪ Chemotherapy-induced nausea and vomiting | | | |
| ▪ (Electro)-Acupuncture as adjunct to antiemetic treatment | 1b | B | + |
| ▪ Acupressure as adjunct to antiemetic treatment | 1b | B | + |
| ▪ Pain | | | |
| ▪ Cancer pain | 1b | B | + |
| ▪ Aromatase-inhibitor – induced arthralgia | 1a | B | + |
| ▪ TENS – Transcutaneous Electrical Nerve Stimulation to relieve cancer pain | 2b | D | +/- |
| ▪ Fatigue | 1a | B | + |
| ▪ Acupressure | 1b | B | + |
| ▪ Anxiety and depression | 2b | B | + |
| ▪ Cognitive dysfunction | 5 | D | +/- |
| ▪ Menopause syndrome in Breast Cancer Patients | 1b | B | + |
| ▪ to improve on frequency and severity of hot flashes | 1b | B | +/- |
| ▪ Electro-Acupuncture to improve on sleep and hot flashes | 2a | B | + |
| ▪ Leucopenia (Moxibustion) | 2b | B | +/- |
| ▪ Treatment of chemotherapy induced polyneuropathy | | | |
| ▪ prophylactically | 1b | B | - |
| ▪ therapeutically | 2b | B | +/- |
| ▪ Chronic lymph edema after Breast Cancer Treatment | 2b | B | +/- |

Complementary Treatment

Mind-Body Medicine I

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| Oxford | | |
|--------|----|-----|
| LoE | GR | AGO |
| 1a | A | + |

MBSR (Mindfulness-Based Stress Reduction)

Program improves quality of life, coping strategies, attentiveness, and lowers stress, anxiety, depression, fatigue, and sleep disturbances

Physical exercise / sport

min. 3x/week moderate endurance training in combination with workout exercises (2x per week) improve quality of life, cardio-respiratory fitness, physical performance, sleep, pain, depression, lymphedema, and fatigue

| | | |
|----|---|----|
| 1a | A | ++ |
|----|---|----|

Complementary Treatment

Mind-Body Medicine II

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Relaxation techniques

Reduction of anxiety and nausea, improvement of quality of life,
reduction of psychological stress

Yoga

Improves sleep, quality of life, stress, anxiety,
depression, fatigue, and sleep

Qi Gong

May improve quality of life, fatigue, and mood

Tai Chi

Improves quality of life, muscular strength, sleep

Hypnosis (in combination with cognitive training)

Improves fatigue and muscle weakness under radiotherapy; also
reduces distress

Oxford

LoE GR AGO

2b C +/-

1b A +

2a B +/-

2a B +/-

1b A +

Prevention of Recurrence/Improvement of Overall Survival I

Modifiable Lifestyle Factors

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- **Physical exercise**
(equivalent to 3–5 hrs moderate walking per week)
improves DFS and OS, cardio-respiratory fitness,
physical functioning
- **Reduce Smoking**
- **Reduce Alcohol consumption (< 6 g/day)**

| Oxford | | |
|--------|----|-----|
| LoE | GR | AGO |
| 2a | A | ++ |
| 2b | A | + |
| 2b | A | + |

Modifiable Lifestyle Factors

Nutrition after Breast Cancer Diagnosis

Prevention of Recurrence / Improvement of Overall Survival II

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- **Adherence to normal BMI / weight loss if overweight, irrespective of HR-status**
- **Low fat diet**
dietary counseling recommended
- **Increased fiber intake (e.g. Flaxseed)**
- **Adherence to general nutrition guidelines**
(e.g. DGE, WCRF) similar to a Mediterranean Diet
- **Dietary extremes**

| Oxford | | |
|--------|----|-----|
| LoE | GR | AGO |
| 1a | A | ++ |
| 1a | B | + |
| 2a | B | + |
| 2a | B | ++ |
| 2a | B | -- |

Complementary Treatment

Prevention of Recurrence / Improvement of Overall Survival III

Dietary Supplements – Herbal Therapies

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| | Oxford | | |
|--|-----------|----------|------------|
| | LoE | GR | AGO |
| Post treatment vitamin/antioxidant supplements does not appear to be associated with increased risk of recurrence (beware of drug/treatment interactions) | 2b | B | |
| Smokers on antioxidant supplements are at higher risk for lung cancer | 1b | A | |
| <u>For Prevention of BC Recurrence:</u> | | | |
| ▪ Antioxidants | 2a | B | +/- |
| ▪ Orthomolecular substances (Selenium, Zinc...) | 5 | D | - |
| ▪ Vitamine supplementation in patients on a balanced diet (esp. Vit C, E, D) | 2a | B | +/- |
| ▪ Artificial carotenoids appear to be associated with worse outcome | 2b | B | - |
| ▪ Proteolytic enzymes (Papain, Trypsin, Chymotrypsin) | 3b | B | - |
| ▪ Soy-food (natural source of phytoestrogens) | 2a | B | +/- |
| – food or concentrates containing ≥ 100 mg) isoflavones per day | 2a | B | - |
| ▪ Black Cohosh (Cimicifuga racemosa) | 3b | C | +/- |
| ▪ Mistletoe (Viscum album) | 1b | C | - |
| ▪ Thymic peptides (impact on OS) | 2a | B | - |
| ▪ Oxygen- and ozone therapy | 5 | D | -- |
| ▪ Antioxidant supplements (after completion of radiotherapy) | 2b | B | +/- |
| ▪ Laetrile | 1c | D | -- |
| ▪ Green tea | 3a | C | +/- |
| ▪ Methadone | 5 | D | -- |
| ▪ Cancer bush (Sutherlandia frutescens), Devil's claw (Harpagophytum procumbens), Rooibos tea (Aspalathus linearis), Bambara groundnut (Vigna subterranean) | 5 | D | - |