Living with advanced cancer – what can Integrative Oncology offer?

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Acupuncture involves fine needles being inserted through the skin and being left in position for a number of minutes. The number of needles varies depending on the indication for use. Acupuncture stimulates the nerves in skin and muscle, and can produce a variety of effects.

**Acupuncture & fatigue, Multi-site RCT**

**Phase I: (n=320):**
- Randomised (3:1) to receive:
  - Acupuncture (n=240) 6 x weekly session in 3 points (LI4, SP6 & ST36)
  - Usual care (n=80) with education booklet

**Results:**
- Significant effect for acupuncture in General Fatigue score (P<.001)
- Multidimensional Fatigue Inventory (MFI) effects

**Phase II: Maintenance (Acupuncture group):**
- 4 x 4 weekly sessions of acupuncture (therapist)
- 4 x 4 weekly sessions of self acupuncture
- No maintenance therapy

**Results:** Acupuncture & self-acupuncture = equivalent effect

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**Acupuncture for Cancer-Related Fatigue in Patients With Breast Cancer: A Pragmatic Randomized Controlled Trial**

Acupuncture: Physiological (CIPN)

ACUFOCIN: Randomised clinical trial of ACUpuncture + standard care versus standard care alone For Chemotherapy Induced peripheral Neuropathy (CIPN)

Wardley AM, Ryder D, Misra V, Hall PS, Mackereth P, Stringer J (Submitted)

Bkgd: CIPN is a dose limiting toxicity, and a major clinical survivorship challenge

Methods: A randomised clinical trial comparing S/C with S/C + Acu
- CIPN ≥ Grade II (CTCAE v4.03)
- ‘Most Troublesome’ CIPN symptom score of ≥ 3 using MYMOP 2

Results: 120 pts randomised. Primary data available for 108 participants
- 36/54 (67%) successes (2 pt ↓ in MYMOP) in Acu+SC vs 18/55 (33%) in SC p<0.001
- 27/53 (51%) pts achieved ↓CIPN (gde ≤ I) in Acu+SC arm vs 4/56 (7%) in SC p<0.001
- All other outcomes also showed significant benefits for Acu+SC arm
- Significant effects seen at week 10 are also present at week 6.

Conclusions: In this patient cohort, a 10 week course of acupuncture significantly improved symptoms of CIPN. Results support further investigation within a phase III trial
Aromatherapy - psychological

Rationale:

- Direct link from the nose to the Limbic system (emotion & emotional memory)

- …Links to cortical areas implicated with emotional processing, depression, social cognition, and facial recognition (Zhou et al, 2019)

- Unique ‘wiring’ of aroma to emotion & memory make odour evoked memories; vivid, potent, intense and have the power to influence mood / emotional state (Sullivan et al, 2015, Herz, 2016)

- Invoking positive auto-biographical odour evoked memory can help repair emotional trauma (Herz, 2016)

- Smelling positive, autobiographical aromas induces slower, deeper breathing & reduces pro-inflammatory cytokines (Masaoka, 2012, 2013)

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Aroma sticks in Cancer Care: An Innovation not to be Sniffed at. Stringer J & Donald G (2010)

The Role of Odour-Evoked Memory in Psychological & Physiological Health. Herz RS (2016)
Active chemical components of EO’s
Review paper: Lizarraga-Valderrama, LR (2020)

Components
- Limonene
- Pinene
- Linalool
- Citronellol
- Menthol
- Benzyl alcohol
- Neral
- Geranial
- B-Myrcene
- B-caryophellene
- Linalyl acetate
- Benzyl benzoate
- 1,8 cineole
- Eugenol

Evidence
- All from studies using inhalation
- Animal & Clinical trials

Physiological Changes in:
- HR, BP, RR
- Serum cortisol levels
- Brain wave composition

Psychological changes:
- Reduction in anxiety, depression
- Increased alertness, relaxation, contentment
Aromatherapy: physiological

Symptom support; malignant wounds

- Excoriated skin
- Bleeding
- Exudate
- Necrosis
- Malodour

Body image
Social isolation
Emotional distress

SE of treatment; Vaginal atrophy

- Chemical menopause (e.g. chemo, Tamoxifen, AIs)
- Hormone replacement may not be appropriate

Patient Concerns

- “I thought I shouldn’t be having sex anymore.”
- “I didn’t feel that it was appropriate to mention it.”
- “My husband is scared to touch me because he’s worried that he will hurt me or give me an infection.”

Patient Feedback

- “Since using the pessaries all my symptoms have cleared up and I’m now able to have sexual intercourse!”
- “I have felt much better since using the pessaries, my dryness and irritation has greatly improved!”
- “Since using the pessaries I haven’t had any yeast infections, even though I’m on 3 sets of antibiotics!”

The symptom management of fungating malignant wounds using a novel essential oil cream
Stringer J, Donald G, Knowles R & Warn P (2014)
Wounds UK, 10(3) 30 – 38
Data for pessaries

Essential Oil Pessaries for the Management of Urogenital Atrophy in Women with Breast Cancer

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Background

• Up to 70% of women treated for breast cancer experience urogenital symptoms which can have a negative impact on quality of life and lead to discontinuation of endocrine therapy.

• Topical estrogen therapy can provide relief but leads to systemic absorption of estrogens and its safety after a diagnosis of breast cancer remains uncertain.

• We have developed a cocoa-butter based essential oil pessary (EOP) as a novel approach to manage the symptoms of urogenital atrophy (UHA) in women post breast cancer diagnosis.

Materials

• Lipophilic cocoa-butter based EOP containing essential oils chosen for their anti-inflammatory and anti-microbial activities were developed (The Christie NHS Foundation Trust).

Inclusion Criteria

• American College of Obstetricians and Gynecologists (ACOG) definition of UHA.

Exclusion Criteria

• Previous use of any estrogen containing products/previous diagnosis of breast cancer.

Methodology

Sample size: 23 women treated for breast cancer with symptoms of UHA were recruited.

Results

• 23 women were treated between 1/2012 and 12/2014.

• 78% were postmenopausal / age range 50-72 years.

• 33/3 (11%) were on an anti-oestrogen inhibitor: 31/3 of Tamoxifen

• 87% (20/23) had previous treatment for UHA

• 63% (14/23) had history of urinary or genitourinary infections

Safety

Baseline Symptom of Concern

Table 1 (MyNPSP) Frequency of Symptom of Most concern: Average baseline score and average score at follow up.

• Secondary symptoms scores and those of activity and wellbeing were evaluable in 16, 15 and 20 patients respectively and all demonstrated significant improvements (p<0.01).

• No adverse events were reported.

• Universal patient acceptance.

Conclusions

• EOPs appear to offer women suffering from UHA as a consequence of treatment for breast cancer a useful alternative therapies to hormonal treatments and topical estrogens.

• Large scale manufacture of the EOPs (8ml/pessary), in GDP conditions, is now underway.

• Formal testing in a clinical trial programme is planned.
Touch: Psychological

“In everything we’ve done, massage is significantly effective. There’s not a single condition we’ve looked at that hasn’t responded positively to massage. Massage works because it changes your whole physiology.”

Tiffany Field, PhD. Touch Research Institute

The HEARTS process

- Hands-on: skilful use of light touch – a group of five techniques always given through fabric
- Empathy – essential to all therapeutic relationships
- Aromas – client-centred use of guided imagery relating to aromatic experiences or the use of essential oils
- Relaxation – a state of calm
- Textures – fabrics used to cover a patient e.g. towels, blankets
- Sound – the sound of the human voice related to the Hands-on techniques

PhD: The Efficacy of Massage with Essential Oils at Reducing Stress in Isolated Patients

- Key finding: A single session of massage was safe and effective way to reduce physiological & psychological indicators of stress

‘Combining Touch & Relaxation Skills for Cancer Care’
(2019) Carter A

Breast cancer patients have improved immune and neuroendocrine functions following massage therapy (2004)
Hernandez-Reif M et al

Massage in Patients undergoing Intensive Chemotherapy Reduces Serum Cortisol and Prolactin.
(2008) Stringer J, Swindell R and Dennis M
An innovative manual therapy for working with scar tissue, developed by Sharon Wheeler in the USA. Introduced into the UK in 2014, it is increasingly used in charitable cancer centres and private clinical settings.

- A light-touch intervention, using hands directly on the surface of the skin without the aid of lubricants or medical devices, to address tissue damage associated with scarring including fibrosis, adhesions, and contracture from medical intervention or trauma.

An evaluation of a ScarWork service for cancer survivors experiencing adverse effects of surgery and/or radiotherapy (2021)

Beverley de Valois, Teresa Young, Clare Scarlett, Emma Holly
Multiple techniques

• Guided visualisation / imagery (Props, e.g. squeezy stars)
• Stress management techniques
• Hypnotherapy