

# Complementary therapies can offer support in the management of preoperative anxiety



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## Significant issue

Preoperative anxiety (POA) occurs in over 50% of patients undergoing surgery or a procedure.

## Possible consequences

POA can lead to worrying, nervousness, and sleep problems before the procedure, and also nausea, anxiety and agitation while coming out of anaesthesia.

Anxiety and stress can lead to vasoconstriction and complicating IV administration, tachycardia, fluctuating blood pressure, a greater need for anaesthetics and pain medication, behaviour changes and a prolonged hospital stay.

POA can even lead to procedure avoidance, with the possible risks attached to it.

## Meaningful complementary therapies – general:

**Touch, being nearby, holding hand, massage, energy work** (Erdoğan Z and Atik 2017; Ayik and Özden 2017; Baldwin et al 2017; Parmar et al 2017; Choi et al 2016; Kurebayashi et al 2016; Goldberg et al 2015; Forward et al. 2015; Kim et al 2015);

**AquaCare – foot soak, with/without Aromatherapy** (Effati-Daryani et al 2015; Wen-Chun 2008; Raymann et al 2005; Saeki 2000, Sung en Tochiara 2000);

**Relaxation - guided imagery** (Ganry et al 2018; Millett and Gooding 2018; Ryu et al 2017; Maurice-Szamburski 2017; Hudson et al 2015; Carwhile et al 2014; Walker et al 2014; Sears et al 2013).

**Music** (Millett and Gooding 2018; Yeo et al 2013).

## Aromatherapy & AromaCare: fragrant (volatile) plant oils & extracts through

Inhalation/ diffusion, topical applications or combined with foot soaks or guided imagery. (Ayik and Özden 2018; Wotman et al 2017; Karadag et al 2017; Ni et al 2017; Hosseini et al 2016; Barata et al 2016; Franco et al 2016; de Sousa et al 2015; Zabirunnisa 2014; Sears et al 2013).

## Well chosen essential oils & CO2's & interventions

- ✓ Are reassuring and promote a sense of safety
- ✓ Can offer anxiety relief with positive effect on physical and emotional responses.

Bulsing 2009; Howard and Hughes 2008; Campenni et al 2004;

## Some essential oils & CO2's

### Spikenard (*Nardostachys jatamansi*)

#### Essential Oil:

Highly relaxing for the CNS, sedative, stress reducing, anti-depressant, grounding, sleep promoting. Yoon et al 2017; Karkada et al 2012; Khan et al 2011; Lyle et al 2009; Take-moto et al 2008, Dhingra en Goyal 2008.

### Bergamot (*Citrus aurantium*), Sweet orange (*C. sinensis*), Neroli (*C. aurantium* var. *amaris*)

#### Essence:

Excellent for anxiety, relaxing, calming, uplifting, increasing positive attitude, brings light, for images of warm and sunny holidays. De Sousa et al 2015; Stea et al 2014; Cho et al 2013; Faturi et al 2010; Lehrner et al 2005; Graham et al 2003.

### Frankincense, Somalian (*Boswellia carterii*)

#### CO2-select extract:

Highly anxiolytic, deeply relaxing, sedative, possibly neuro-protective; sleep promoting; supporting breathing (deepening, respiratory tonic); Reminding of (sacred) rituals, churches and holy places. Pollastro et al 2016; Al-Yasiry et al 2016; Moussaieff et al 2008; Chang 2008; Lockhart 2000.

### Vetiver (*Ruh Khus*) , *Vetiveria zizanoides*

#### Essential Oil:

Highly calming, grounding, sedative, sleep promoting. Nirwane et al 2015; Arzi et al 2010.

### Lavender, True (*Lavandula angustifolia*) – especially High Altitude Lavender

Calming, sedative, anxiolytic, sleep promoting. Highly popular, well founded. Reminding of lavender fields, holidays. Wotman et al 2017; Karadag et al 2017; Stea et al 2014; de Sousa et al 2015; Zabirunnisa 2014; Seifi et al 2014; Schuwald et al 2013; Cho et al 2013; Shahnazi et al 2012; Fayazi et al 2011; Muzzarelli 2006; Lehrner et al 2005.

*Nardostachys jatamansi*

Essential oil of Spikenard

*Citrus species*

Expressed oil Of Bergamot, Sweet Orange or Neroli

*Boswellia Carterii* CO2-se

Somalian Frankincense CO2-select extract

*Vetiveria zizanoides*

Vetiver or Ruh Khus Essential oil

*Lavandula angustifolia*

True Lavender Essential oil

**Author's experience & conclusion: aromatherapy can significantly promote wellbeing before, during and after operations & procedures**