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VIDEO-BASED CBT FOR INSOMNIA

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TRIAL SUMMARY: Video-based CBT effective and accessible for insomnia in cancer

Savard J, Ivers H, Savard M-H, Villa J, & Morin CM. Preliminary results of a randomized controlled trial assessing the efficacy of a video-based cognitive-behavioural therapy for insomnia in breast cancer patients, CAPO 2013, abstract B123.

This randomized controlled trial (RCT) explored the efficacy of video-based vs professionally administered cognitive behavioural therapy for insomnia (CBT-I) in 242 women with breast cancer (BCa). Participants were randomized to receive video-based CBT-I (VCBT-I), professionally administered CBT-I (PCBT-I), or usual care (control group: CTL). Hypothesized interactions between treatment modality and temporal changes on outcome variables were tested with linear (normal outcome) or generalized (binary outcome) mixed models using a factorial design. Several possible confounding variables were investigated

(e.g. demographic and medical characteristics); however, none were retained as covariates.

FINDINGS

Preliminary results from the RCT found significant group-by-time interactions on all sleep variables (excluding early morning awakening [EMA] and total sleep time [TST]). Followup analyses revealed that VCBT-I and PCBT-I were both significantly superior to the control group, with PCBT-I showing a statistical advantage over VCBT-I on several sleep variables (Insomnia Severity Index [ISI] scores, sleep onset latency, wake after sleep onset) and variables often associated with insomnia (i.e. anxiety, depression, fatigue, dysfunctional beliefs about sleep). The authors conclude that PCBT-I appears to be the optimal format for delivering CBT-I, however, they note the potential utility for VCBT-I to be offered as an accessible, valuable first-line treatment as part of a stepped-care model for insomnia.

COMMENTARY:

Insomnia is found to significantly affect both psychosocial and physical functioning among individuals with cancer. Possible negative consequences include, but are not limited to, increased fatigue, increased risk for developing psychologic disorders, deficits in concentration and memory, impaired daytime functioning, negative effects on comorbidities, increase in health care services use, and overall reduced quality of life.[1,2] Insomnia is of particular concern for women with breast cancer (BCa), with prevalence rates ranging from 59.6 to 69.6%.[3] With increased awareness of the negative effects of insomnia in women with BCa, the known efficacy of cognitive behavioural therapy (CBT) to treat insomnia, and the acknowledged limited access to CBT in clinics, it is imperative that self-guided interventions be further developed and tested. In this study, Savard et al compared video-based CBT (VCBT-I), professionally administered CBT (PCBT-I), and usual care (control group: CTL).

In an early pilot study with VCBT-I, the research team found significantly improved sleep variables and improved quality of life.[1] Based on these results, the investigators used a randomized controlled trial (RCT) to compare the efficacy of VCBT-I, PCBT-I, and CTL on subjective (Insomnia Severity Index [ISI]; sleep diary) and objective sleep measures (actigraphy), as well as additional variables associated with

insomnia (Hospital Anxiety and Depression Scale [HADS]; Multidimensional Fatigue Inventory [MFI]; EORTC Quality of Life Questionnaire; Dysfunctional Beliefs about Sleep Scale [DBAS]). They hypothesized that both PCBT-I and VCBT-I would lead to significant sleep improvements as compared to CTL but that VCBT-I would be more cost-effective (cost analyses have yet to be performed).

To test the main study hypotheses, the authors recruited 242 women with nonmetastatic BCa who had completed radiation therapy and had clinical levels of insomnia on the ISI (or had used hypnotics 2 or more nights in 2 weeks). Participants were randomized to VCBT-I (n=80), PCBT-I (n=81) or control group (n=81). VCBT-I participants received 6 weekly 10-minute videos and short work booklets (total 60-minute video and 6 booklets), those in PCBT-I received 6 weekly 50-minute sessions administered by a therapist, and the CTL received care as usual.

Savard et al found significant group (treatment modality) by time interactions on all sleep variables (excluding early morning awakening [EMA] and total sleep time [TST]). Followup analyses revealed that VCBT-I and PCBT-I were both significantly superior to the control group, with PCBT-I showing a statistical advantage over VCBT-I on several sleep variables (ISI scores, sleep onset latency, wake after sleep

onset) and variables often associated with insomnia (i.e. anxiety, depression, fatigue, dysfunctional beliefs about sleep). There were no significant group-by-time interactions for actigraphy or quality of life. Remission rate, as defined by having an ISI score lower than 8, was significantly greater in PCBT-I than VCBT-I, which was significantly higher than

IN BRIEF

Already known
- CBT is the treatment of choice for insomnia among individuals with cancer; however, patient access to PCBT-I remains limited.

What this study showed
- PCBT-I shows significantly stronger effects than VCBT-I on symptoms of insomnia and several associated features.
- VCBT-I shows significantly stronger effects than usual care (CTL).
- VCBT-I may be a valuable first-line treatment for BCa patients, as part of a stepped-care model for insomnia.

Next steps
- Investigate the potential long-term effects (i.e. sustainability of benefits) associated with the different intervention modalities, using longitudinal designs.
- Compare cost-effectiveness of both interventions.
- Assess the role of treatment adherence in efficacy and differential effects of interventions according to participants' preferences.

CTL. When participants were divided into low or high ISI scores at baseline, results revealed that remission rates were much lower in participants with high ISI scores at baseline who received VCBT-I. One limitation worthy of consideration was the relatively low participation in the study (~20%), which precludes broader generalization.

The findings from this study indicate that PCBT-I was more effective than VCBT-I on reducing symptoms of insomnia and associated features. However, participants randomized to VCBT-I consistently reported greater sleep improvements than CTL. Savard and colleagues demonstrated that VCBT-I is significantly more efficacious than CTL, a highly relevant finding in the context of scarce healthcare resources and the recent adoption of stepped-care models. As an accessible and relatively low-cost intervention, VCBT-I could reach many patients, especially those with less severe insomnia at baseline. Patients who did not respond optimally to VCBT-I as a first-line intervention could then be referred to PCBT-I for more intensive individualized treatment.

Further research is needed to: compare the sustainability of treatment effects over time between the different CBT-I modalities, assess the differential impact of PCBT-I and VCBT-I on sleep/wake patterns, explore intervention adherence, and study cost-effectiveness. Research exploring patients' reasons for choosing to participate and patients' preferences for the distinct treatment modalities may provide additional insight into this novel therapeutic approach.

References
1 Savard J, Villa J, Simard S et al. Feasibility of a self-help treatment for insomnia comorbid with cancer. *Psycho-Oncol* 2001;20:1013-9.
2. Savard J, Morin CM. Insomnia in the context of cancer: a review of a neglected problem. *J Clin Oncol* 2011;19:895-908.
3. Savard J, Villa J, Ivers H et al. Prevalence, natural course, and risk factors of insomnia comorbid with cancer over a 2-month period. *J Clin Oncol* 2009;27:5233-6239.