

- Title** *Shirodhara* for Anxiety, Insomnia, Mental Stress, Depression or Headache
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### Aim

To assess the safety, efficacy / effectiveness, economic and organizational implication of *Shirodhara* as a complement therapy to standard treatment for anxiety, insomnia, mental stress, depression, or headache.

### Conclusions and results

A total of 150 titles were identified through the Ovid interface, AMED database, MANTIS and PubMed. There were seven articles included in this review: two RCTs, two randomised cross over studies, two pre- and post-intervention studies, and one case series. Three studies were conducted in Japan, three in India and one in the United States of America (U.S.A.). Four of the studies were conducted among healthy population. All studies had small sample size.

### Safety

There was very limited retrievable evidence to suggest that *Shirodhara* is safe. However, it should be performed in the most appropriate and safest conditions since in some extreme conditions, some subjects suffered from headache, chill, or other discomfort.

### Efficacy

There were four articles retrieved on the efficacy / effectiveness of *Shirodhara* for treatment of anxiety, two articles for treatment of insomnia and one article for mental stress.

There was very limited retrievable evidence to suggest the effectiveness of *Shirodhara* in reducing anxiety, insomnia and mental stress. Three studies reported that as anxiety score decreases, the altered state of consciousness (ASC) scores increases and the skin temperature of the foot increases with increased in ASC scores and decreased in anxiety scores. One study reported an overall significant improvement of mean Insomnia Severity Index (ISI) between baseline and day five (end of treatment); at baseline, the mean ISI score was 19.44, and at day five, the mean ISI score was 13.22, ( $P < 0.005$ ), while the recovery of symptoms for insomnia was found to be significant in another study. One study reported significant improvement in mood scores and level of stress ( $P = 0.003$ ). Since the studies retrieved were of short duration, the long term effect of *Shirodhara* on anxiety, insomnia and mental stress could not be determined.

There was no retrievable evidence on the efficacy / effectiveness of *Shirodhara* for the treatment of depression or headache.

### Cost /cost-effectiveness

There was no retrievable evidence on cost-effectiveness.

### Organizational

It is pertinent to have a guideline in order to provide safe, quality, and standardised practice of *Shirodhara* especially at all Traditional & Complementary Medicine Units in the Integrative Hospitals. The practitioners need to be trained.

### Recommendations (if any)

Based on the above review, *Shirodhara* conducted by trained personnel may be used in a research environment as a complement therapy to standard treatment for anxiety, insomnia or mental stress. Patients should be referred by clinicians.

### Methods

Electronic databases were searched through the Ovid interface: Ovid MEDLINE® In-process and other Non-indexed citations and Ovid MEDLINE® 1946 to present, EBM Reviews - Cochrane Central Register of Controlled Trials - January 2015, EBM Reviews - Cochrane Database of Systematic Reviews - 2005 to January 2015, EBM Reviews - Health Technology Assessment - 1<sup>st</sup> Quarter 2015, EBM Reviews - NHS Economic Evaluation Database 1<sup>st</sup> Quarter 2015, AMED - 1985 to February 2015, MANTIS Database - 1980 to February 2015. Searches were also run in PubMed. Google was used to search for additional web-based materials and information. No limits were applied. Additional articles were identified from reviewing the references of retrieved articles. Last search was conducted on 4 March 2015.

### Further research/reviews required

### Written by

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