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Meditation as a Tool for Blood Pressure Management

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Purpose

Appraise existing evidence about meditation and blood pressure in persons with cardiac risk factors and offer evidence based recommendations about the use of meditation in management of blood pressure.

Background

- Hypertension is a common and costly condition affecting approximately 29% of the U.S. population. (Merai, et al., 2016).
- Is a significant risk factor for coronary heart disease and stroke. (Merai, et al., 2016)
- Estimated to cost the United States approximately \$46 billion each year in health care services, medications and missed days of work. (Merai, et al., 2016)
- Meditation is an increasingly common form of stress reduction that is cited as potentially reducing blood pressure. (Machiori et al., 2014)

Evidence Appraisal

- Medline, CINAHL, HealthSource, and PSYCHinfo were searched using the key terms: meditation, blood pressure and, mindfulness.
- Evidence examined were Level II RCTs of moderate quality and strength.
- Small samples sizes and variability in findings limited clinical significance.

Evidence Synthesis

- Three of the five studies analyzed found evidence that meditation practice in patients with hypertension and/or coronary heart disease lowers SBP by approximately 5 mm Hg ($p < 0.05$) (Hughes, et al., 2013; Parswani et al., 2013; Schneider et al., 2012)
- Two studies found no statistically significant impact, suggesting a lack of adherence to the meditation practice (Marchiori et al., 2014) and the exclusion of participants on blood pressure medications as factors contributing to these findings. (Blom et al., 2014).
- Meditation Is a low risk, low cost adjunct treatment option.

Translation to Practice

- Conversation between the provider and patient about meditation and its potential benefits during primary care appointments with patients to discuss their blood pressure management.
- Creation and distribution of an information sheet detailing the potential benefits of meditation, encouraging a daily practice of two minutes of meditation and including tips of how to meditate.

Proposed Evaluation

- Monthly meetings with patients working on meditation practice to assess adherence and encourage practice.
- Monthly evaluation of blood pressure.
- Assess impact over the period of one year.

Conclusion

- Daily meditation may lower SBP by approximately 5 mm Hg in persons with known cardiac risk factors.
- Primary care providers should educate themselves about the benefits of meditation and offer this to their patients as a lifestyle modification that may improve their cardiovascular health.



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