Meditation or exercise for preventing acute respiratory infection

Journal Article, Randomized controlled trial

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Summary

- This article assessed the role of practice of meditation (Mindfulness-based stress reduction)or equivalent physical exercise (moderate intensity sustained exercise) in preventing acute respiratory infection (ARI) illness.
- It was an 8-week trial with 3 parallel groups: Meditation (137), Exercise (138) and Controls (138).
- Weekly ARI surveillance and daily reports on ARI illness were recorded to obtain incidence, duration and area under curve of ARI global severity. Viruses (EV, RV, CoV& Influenza V) were identified by multiplex PCR.
- There was significant improvement in general mental health, self-efficacy, attention, sleep quality, perceived stress, and depressive symptoms in patients practising meditation or exercise.
- There was significant reduction in ARI incidence attributable to meditation (p=0.044), and a decrease in total days of illness for exercise (p=0.004), but no statistically significant effect on global severity.
- Both meditation (p=0.01) and exercise (p=0.02)enhance interferon gamma-induced protein 10(IP-10) response to ARI;whereas, exercisemay have increased IL-8 response (p=0.03).
- Within-group-over-time comparisons showed statistically significantdifference between meditation and exercise group. Themedian C-reactive protein levels decreased onlyin the meditation group (p=0.002).
- Authors believe: Trial was probably underpowered, and additional research is required in patients with severe viral illness or higher risk groups to document additional health benefits.
- Authors suggest: Practice of meditation and exercise should be advocated as benefit appears likely and the risk associated is minimal.

Conclusion

- The practice of meditation or exercise has a potential benefit to improve general health in patients withacute respiratory illness.

Appraisal

- Strength:Effect of meditation or exercise in RCTinvolving largely virus induced ARIs.
- Limitation: Use of mild ARI cases who did not regularly meditate or exercise.

Opinion

- It provides a rationalefor using meditation or exercise for promoting general health during mild acute respiratory illness caused by these viruses.

Appraisers:

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