

Effect of Yoga on Diabetic Type - 2 Malicious

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Abstract: *It is already established that yoga may be applied as an alternative therapy for rehabilitation from Type 2 Diabetic Malicious. But it is not cleared that what mechanism behind it works. The aim of this study was to determine the effect of regular practice of yogic on Type 2 Diabetic Malicious and know the mechanism. Total fifty published in PubMed papers from 2005 to 2024 were taken into consideration. Yogic intervention may elicit a positive improvement in Type 2 Diabetic Malicious that may be due to reduce activation of the sympathetic - adrenal system and hypothalamic - pituitary - adrenal axis, and may enhance parasympathetic activity, thereby alleviating stress.*

Keywords: Yoga - Diabetic - Malicious

1. Introduction

Managing blood glucose levels is essential for Type 2 Diabetic Malignancy (T2DM) (American Diabetes Association, 2013), and better glycemic control is linked to a significant reduction in long - term complications (Skyler et al., 2009; Stettler et al., 2006). Generally speaking, a 1% decrease in haemoglobin A1c (HbA1c) reduces the risk of developing eye, renal, and nerve disease by 40% (Centre for Disease Control and Prevention, 2012). The purpose of the study is to determine whether yoga has a beneficial effect on the effectiveness of T2DM, as well as the mechanism underlying it.

2. Review of Related Literature

Yoga, an ancient Indian practice, has demonstrated encouraging results in glycemic control among Innes & Selfe (2016), Kumar et al. (2016), and Cui et al. (2016) all have T2DM patients. Yoga practice consists of two parts: relaxation (shavasana, meditation) and physical activity (postures, or asana). Yoga, with its focus on controlling breath, holding postures, and meditation, increases the practitioners' attention to body sensations and present moment experiences. This may help with diabetes management since mindfulness training has been proven to boost one's ability to notice and skilfully respond to emotional stress, leading to successful coping responses (Shapiro, Carlson, Astin, & Freedman, 2006; Vago & Silbersweig, 2012).

3. Method

Fifty papers published between 2005 and 2024 that were indexed by PubMed were systematically reviewed.

4. Discussion

According to R. P. Brown and Gerbarg (2005) and Streeter, Gerbarg, Saper, Ciraulo, and Brown (2012), yoga may also increase parasympathetic activity and decrease activation of the hypothalamic - pituitary - adrenal axis and sympathy - adrenal system, which in turn may reduce stress. Yoga has been demonstrated to reduce stress in clinical investigations

involving both healthy and sick people (Chong, Tsunaka, Tsang, Chan, & Cheung, 2011; Kohn, Persson Lundholm, Bryngelsson, Anderzen - Carlsson, & Westerdahl, 2013; Li & Goldsmith, 2012). Yoga may help manage blood glucose levels by promoting stress resistance and preventing stress - induced increases in cortisol (Else, Hammer, & McPhee, 2010; Walker, 2006). Following a yoga intervention, diabetics' stress levels have been found to reduce in pilot trials, primarily in India (Beena & Sreekumaran, 2013; Vizcaino, 2013).

5. Conclusion

Yoga practice may result in better self - care practices, such as better eating and exercise, by lowering stress and enhancing awareness. Improved dietary outcomes following yoga intervention have been demonstrated in randomized trials involving adults who are binge eaters and at risk for cardiovascular disease (Alexander, Innes, Selfe, & Brown, 2013; Carei, Fyfe - Johnson, Breuner, & Brown, 2010; McIver, McGartland, & O'Halloran, 2009). Yoga may therefore have a beneficial effect on stress, nutrition, and other self - care practices that lead to better glycemic control.

References

- [1] Brown CJ, Selfe TK, Innes KE, and Alexander GK (2013). The perceived advantages of yoga practice among older persons at risk for cardiovascular disease were "more than I expected. " 21 (1), 14–28; doi: 10.1016/j.ctim.2012.11.001
- [2] (2013) American Diabetes Association. Diabetes - related medical treatment standards as of 2013. Care for Diabetes, 36 Suppl 1, S11.
- [3] Manoj I, Harinder S, Prabhakar S, Amita S, and Pavan T (2009). Yoga - nidra's effect on diabetic patients' blood glucose levels.97–101 in Indian J Physiol Pharmacol, 53 (1).
- [4] Sreekumaran E, and Beena RK (2013). Diabetes mellitus and yogic practices in elderly individuals.7 (1), 47–54; doi: 10.4103/0973 - 6131.105946; Int J Yoga.
- [5] Gerbarg PL and Brown RP (2005). Sudarshan Kriya yogic breathing in the treatment of stress, anxiety, and depression: part I - neurophysiologic model. J Altern

Complement Med, 11 (1), 189–201. doi:
10.1089/acm.2005.11.189

- [6] Carei TR, Fyfe - Johnson AL, Breuner CC, & Brown MA (2010). Randomized controlled clinical trial of yoga in the treatment of eating disorders. J Adolesc Health, 46 (4), 346–351. doi: 10.1016/j. jadohealth.2009.08.007 S1054 - 139X (09) 00334 - 6 [pii]