## **OTHER ARTICLES**



## Use of Saline Nasal Irrigation (Jala Neti) in SARS-CoV-2 Infection and its Complications Like Mucormycosis Needs to be Given a Serious Consideration

Sanjeev Rastogi<sup>1</sup> · Rajiv Rastogi<sup>2</sup>

Received: 18 January 2022 / Accepted: 19 August 2022 © Association of Otolaryngologists of India 2022

SARS-CoV-2 related pandemic is not yet over. The world continues to be in the grip of chaos, this time due to rapidly emerging variants of virus resulting in recurrent waves of its re-emergence. Seeing the limitations of all measures adopted so far ranging from repurposing of drugs to vaccination for mitigation, control, prevention and treatment of the condition, any new idea having a prospecting potential to add value in the ongoing strategies should be welcomed. Sarma P et al. [1] publication in Indian J Otolaryngol Head Neck Surg on yogik neti kriya using povidone iodine (PVP-I) should primary be seen in this spirit.

Jalaneti (saline nasal irrigation) is frequently used as a primary modality for the treatment of recurrent sinusitis [2], nasal polyp[3] and has a potential for treating SARS- CoV-2 related or uncontrolled diabetes induced rhino-orbito-cerebral mucormycosis [4].

Biggest strength associated with jalaneti is its low cost, high tolerance, ease of operation (allows it to be performed at home provided that the procedure is well demonstrated and explained to users). We however need to understand that this strength of jalaneti is essentially limited till it is done with saline water. Any deviations from the conventional protocols may have their own merits or demerits subject to their further evaluation.

It is in this perspective, the review of Sarma et al. needs to be critically evaluated. We have a strong disagreement with authors calling this whole procedure 'Yogik Neti Kriya'.

 Sanjeev Rastogi rastogisanjeev@rediffmail.com
Rajiv Rastogi

Rajiv Rastogi rajivrastogi2018@gmail.com

Published online: 09 September 2022

- Department of Kaya Chikitsa, State Ayurvedic College and Hospital, Lucknow University, Lucknow, India
- Faculty of Naturopathy and Yogic Sciences, SGT University, Gurugram, Delhi, India

Since the procedure neither is adopted to comply with any Yogic accomplishment nor it follows the classical versions of jala or sutra neti, it should not be given an outfit of traditional wisdom just because of resemblance in approach despite of having distinctly different objectives. The procedure should ideally be called as 'Povidone –Iodine nasal irrigation' in order to distinguish it clearly from classical jalaneti.

The authors have loosely described the process of standardisation of jalaneti process which is not only inadequate and cumbersome but also reflects that the authors have not reviewed the related literature adequately. Standardisation and simplification of jalaneti was first attempted by Rastogi et al.in 2009 [5] where they proposed the use of isotonic saline plastic squeezable bottle for jalaneti instead of conventional netipot. Similar standardised procedure was used recently to manage a case of rhino-orbito-cerebral mucormycosis [4].

Evidences are suggestive of effectiveness of PVP-I solution nasal application in inactivating SARS-CoV-2 [6] and hence may have a potential preventive application. Evidences are however also suggestive that the process may be safe for certain period of time only. This time constraint raises a concern about feasibility of actual use of PVP-I in SARS-CoV-2 pandemic which has already expanded beyond two years. Here this would be important to take a note of author's experience of PVP-I nasal irrigations which was extended as long as 15 years. We wonder what has actually prompted the authors to make this experiment on their own for this long period. It was done for a prophylaxis or had a curative purpose? In normal course such experimentations should be limited to specific objectives and should not be considered part of routine life style.

Finally, a small factual error which we believe is a typo. First case of COVID-19 was reported in December 2019[7] and not in November 2019 as was reported by the authors.



## **Declarations**

Disclosure of Potential Conflicts of Interest The authors have no relevant financial or non-financial interests to disclose. The authors have no competing interests to declare that are relevant to the content of this article. All authors certify that they have no affiliations with or involvement in any organization or entity with any financial interest or non-financial interest in the subject matter or materials discussed in this manuscript. The authors have no financial or proprietary interests in any material discussed in this article.

**Research Involving Human Participants and/or Animals** This research do not involve human participants and/or animals.

**Informed Consent** Informed consent was not applicable in this manuscript as it did not involve human participation.

## References

- Sarma P, Bhattacharyya A, Prakash A et al (2021) Yogic Neti-Kriya Using Povidone Iodine: Can it have a Preventive Role Against SARS-CoV-2 Infection Gateway? Indian J Otolaryngol Head Neck Surg. https://doi.org/10.1007/s12070-021-02885-2
- Rastogi S, Ranjana Rastogi R (2007) Jalaneti application in acute rhino sinusitis. Indian J Tradit Knowl April 6(2):324–327 [Google Scholar]
- Rastogi R, Murthy BT (2009 Oct-Dec) Vinudha Non-pharmacological management of nasal polyp: a case report. Indian J

- Physiol Pharmacol 53(4):380–382 PMID: 20509333. [PubMed] [Google Scholar]
- Rastogi S, Verma A (2021) Jalaneti (saline nasal irrigation) as primary intervention in suspected rhino-orbito-cerebral mucormycosis helps improving the recovery: A case report [published online ahead of print, 2021 Nov 1]. J Ayurveda Integr Med 13(2):100516. doi:https://doi.org/10.1016/j.jaim.2021.08.009
- Rastogi S, Rastogi R, Rastogi R (2009) Standardization and simplification of physico-therapeutic procedures in Ayurveda and naturopathy: a preliminary study with Jala Neti. Indian J Tradit Knowl July 8(3):464–470 [Google Scholar]
- Pelletier JS, Tessema B, Frank S, Westover JB, Brown SM, Capriotti JA Efficacy of Povidone-Iodine Nasal and Oral Antiseptic Preparations Against Severe Acute Respiratory Syndrome-Coronavirus 2 (SARS-CoV-2). Ear Nose Throat J. 2021 Apr;100(2\_suppl):192S-196S. doi: 10.1177/0145561320957237. Epub 2020 Sep 21. Erratum in: Ear Nose Throat J. 2020 Dec 8::145561320977784. PMID: 32951446
- https://www.who.int/docs/default-source/coronaviruse/situationreports/20200423-sitrep-94-covid-19.pdf

**Publisher's Note** Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

Springer Nature or its licensor holds exclusive rights to this article under a publishing agreement with the author(s) or other rightsholder(s); author self-archiving of the accepted manuscript version of this article is solely governed by the terms of such publishing agreement and applicable law.

