## Commentary: Thyroid eye disease—does the profile differ in India?

Thyroid eye disease (TED) is an autoimmune condition with significant sight-threatening and cosmetic morbidity that has a profound bearing on the quality of life. It has often been argued that the prevalence and the clinical profile differ considerably in the Indian population as compared to Caucasians. However, there have been very few studies from India to throw light on this aspect. The article on the subject in this issue of the Indian Journal Ophthalmology (IJO)<sup>[1]</sup> is, therefore, welcome. This article presents the clinical spectrum and identifies the risk factors predictive of disease severity by a cross-sectional study.

The study included 106 patients diagnosed at a tertiary eye care hospital in north India over a period of 18 months. The TED was considered as significantly active with a score of >4/10 by vision, inflammation, strabismus, and appearance (VISA) classification, and severity was graded as mild, moderate, severe, and sight-threatening based on European Group of Graves' Orbitopathy (EUGOGO) classification. [2]

The differences in the profile of patients such as female to male ratio of 1.12:1 as compared to >3:1 in studies from EUGOGO<sup>[2]</sup> is interesting. The mean age of patients in the study (40.30±14.76) is similar to Southeast Asian populations<sup>[3]</sup> but younger than the EUGOGO studies. A striking feature from this study is that the number of patients that were hypothyroid (33.96%) or euthyroid (19.81%) was much higher than in the studies by EUGOGO (3.0% and 2.9%, respectively) and from Southeast Asia and China.<sup>[4]</sup> This, according to the authors, may at least partially be explained by the fact that the study included patients with mild symptoms such as dry eye and mild eyelid retraction. This is corroborated by the observation that hyperthyroidism was significantly associated with severe TED as compared to euthyroid and hypothyroid status.

Most cases had bilateral disease (81.1%), similar to other studies from India (Bhaskar *et al.* 97.0%), <sup>[5]</sup> from Asia (Lim *et al.* 95.4%)<sup>[3]</sup> and EUGOGO (87.68). <sup>[6]</sup> Lower lid retraction was noted to be a significant sign (alone in 28.3% and along with upper lid retraction in 34%) not observed in earlier Indian studies but similar to other studies from Asia. Sight-threatening TED was seen in 7.5% of the patients, similar to a study from Southeast Asian populations (8%)<sup>[3]</sup> but higher than the previous Indian study (2%)<sup>[5]</sup> and lower than that reported by EUGOGO (28%)<sup>[2]</sup> and other Caucasian studies (12.9%).<sup>[7]</sup>

The fact that the presence of activity and hyperthyroid status were significantly associated with severe disease stresses the need for closer follow-up in these cases.

This study is important as it offers important hospital-based data on epidemiology and clinical profile of patients of TED from a north Indian population. However, the data must be interpreted with the knowledge that this emanates from a tertiary care center, with referral bias to a super specialty oculoplastic service.

More population-based surveys on systemic thyroid disease as well as TED will offer greater insights.

## Ashok Kumar Grover

Department of Ophthalmology, Sir Ganga Ram Hospital and Vision Eye Centres, New Delhi, India

Correspondence to: Dr. Ashok Kumar Grover, Vision Eye Centre, 19, Siri Fort Road, New Delhi - 110 049, India. E-mail: akgrover55@yahoo.com

## References

- Muralidhar A, Das S, Tiple S. Clinical profile of thyroid eye disease and factors predictive of disease severity. Indian J Ophthalmol 2020;68:1629-34.
- Marcocci C, Sartini M, Kahaly G, Nardi M, Lazarus J, Halkias A, et al. Multi-center study on the characteristics and treatment strategies of patients with Graves' orbitopathy: The first European Group on Graves' Orbitopathy experience. Eur J Endocrino 2005;148:491-5.
- Lim NCS, Sundar G, Amrith S, Lee KO. Thyroid eye disease: A Southeast Asian experience. Br J Ophthalmol 2015;99:512-8.
- Yang H, Chen R, Xu J, Liu Z, Ye H, Chen G, et al. Clinical characteristics of moderate-to-severe thyroid associated ophthalmopathy in 354 Chinese cases. PLoS One 2017;12:e0176064.
- Reddy SVB, Jain A, Yadav SB, Sharma K, Bhatia E. Prevalence of graves' ophthalmopathy in patients with graves' disease presenting to a referral centre in north India. Indian J Med Res 2014;139:99-104.
- Perros P, Azzolini C, Ayvaz G, Baldeschi L, Bartalena L, Boschi A, et al. PREGO (presentation of Graves' orbitopathy) study: Changes in referral patterns to European Group On Graves' Orbitopathy (EUGOGO) centres over the period from 2000 to 2012. Br J Ophthalmol 2015;99:1531-5.
- 7. Tramunt B, Caron P, Boutault F, Imbert P, Grunenwald S. Sight-threatening Graves' orbitopathy: Twenty years' experience of a multidisciplinary thyroid-eye outpatient clinic. Clin Endocrinol (Oxf) 2018;90:208-13.

This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

Access this article online	
Quick Response Code:	Website:
同2402年间	www.ijo.in
	DOI: 10.4103/ijo.IJO_2274_20

Cite this article as: Grover AK. Commentary: Thyroid eye disease—does the profile differ in India? Indian J Ophthalmol 2020;68:1635.