EDITORIAL

香 港 眼 科 醫 學 院

Thyroid eye disease: endocrinologist, endocrine surgeon, and ophthalmologist perspectives

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Thyroid eye disease presents with a range of orbital and ocular manifestations associated with thyroid dysfunction, usually secondary to an autoimmune condition or Graves disease. Other conditions such as Hashimoto's thyroiditis, thyroid carcinoma, primary hyperthyroidism, and primary hypothyroidism can also result in thyroid eye disease. Orbital involvement is the most common extrathyroidal manifestation. Graves disease affects up to 2% of the female and 0.2% of the male population.[1] Up to 20 to 25% of patients with Graves disease will have eye involvement at the initial diagnosis and up to 50% of patients will develop it during the course of disease.[2] Up to 3 to 5% of patients have severe involvement.[3]

The pathogenesis of ophthalmopathy secondary to thyroid disease is not entirely understood. An autoimmune inflammatory process that targets orbital and periorbital tissue can result in debilitating diplopia, proptosis, eyelid retraction, exposure keratopathy, glaucoma, and irreversible optic neuropathy.[4,5] Even in mild cases, quality of life can be affected.[6] The condition can be disfiguring and have a major psychosocial impact on patients and their family. Complications such as dysthyroid optic neuropathy, glaucoma, exposure keratopathy, and globe subluxation may result in irreversible vision loss. To further complicate matters, thyroid eye disease can manifest differently in Asian populations and its management may differ to that reported in the western literature.[7] The European Group on Graves' orbitopathy has published a consensus statement on management of the disease.[5] Its latest guidelines emphasize the need for patient-centered management to improve quality of life and psychosocial well-being, as is the need to promptly restore and maintain stable euthyroidism.[8] The course of thyroid eye disease can progress rapidly in patients who smoke, have fluctuating thyroid function, or are prescribed radioactive iodine for hyperthyroidism.[5] In a nationwide survey in the UK, only 56% of responders were satisfied with the management of their thyroid eye disease.[9] Multidisciplinary collaboration between different specialties to provide a patient-centered and holistic approach is vital.

In this issue, we have invited experts in different aspects of thyroid and thyroid eye disease to provide updated perspectives for management. We have included the perspectives of an endocrinologist, an endocrine surgeon, and an ophthalmologist to provide an all-encompassing understanding of this systemic-ophthalmic condition. From an endocrinologist perspective, Lee[10] stress the importance of anti-thyroid medication such as thionamides to attain optimal control of thyroid function. Patients may need to

be referred for thyroidectomy when euthyroidism is not achieved by medication alone or a more definitive treatment is desired. From an endocrine surgeon perspective, Man and Lang[11] highlight the advantage of surgical thyroidectomy for rapid resolution of thyroid dysfunction without the risks associated with radioactive iodine. From an ophthalmologist perspective, Chong and Lai[7] report their experience from the first thyroid eye clinic in Hong Kong. A multidisciplinary approach enables more efficient patient-care. Surgical intervention may be necessary for vision-threatening complications not amendable by immunosuppressants.[7] In stable disease, rehabilitative surgery may be appropriate to correct residual abnormalities such as proptosis, strabismus, and eyelid malposition to improve function and esthetic outcome. The skills of an oculoplastic and strabismus surgeon are often required.

Thyroid eye disease exemplifies the importance of a collaborative multidisciplinary approach for patient-centered care to achieve optimal outcome and patient satisfaction.

As this is the final issue of the *Hong Kong Journal of Ophthalmology* (HKJO) published by the current Editorial Board, the Editor would like to take this special occasion to thank all contributors, scientific reviewers, and members of the Editorial Board for their invaluable input during the past two years. During which, HKJO has made a big leap forward from being a print journal to a print-and-electronic journal indexed on Google Scholar. We have built a dedicated website with online submission capability. The Editorial Board would like to thank Dr Alvin Au for his tremendous work in setting up and maintaining the website. This would not have been made possible without the generous support from the College, and of utmost importance, from our readers.

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