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Pharmacological Management of Thyroid Disorders

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Pharmacological Management of Thyroid Disorders

Hyperthyroidism and hypothyroidism are both diseases related to medical problems of the thyroid gland. ¹Hyperthyroidism is a medical condition that occurs when the thyroid gland produces excess thyroid hormones. This condition influences an increase in metabolic rate and oxygen consumption which leads to the increase in the catabolism of protein which affects the beta adrenergic receptors in the cardiovascular system. Hypothyroidism is a condition that involves a decrease in thyroid hormone production, diminished synthesis of proteins, and leads to change in the processes of the nervous system (Munoz, 2019). The two conditions are related but different and various medications can be used to enhance the treatment of the conditions. Hyperthyroidism would be treated successfully by the use of peroxidine, aldoramine, iodimine, and cimigine. Peroxidine will enhance the inhibition of peroxidase which is produced by the thyroid gland. Peroxidase is an enzyme that enhances the increased production of thyroid hormone. Peroxidase is an enzyme that is controlled in thyroid disease to ensure that excessive production of thyroid hormone is inhibited (Trohman et al., 2020). Therefore, peroxidine will enhance a decrease by diminishing the production of peroxidase. Iodimine is a drug that inhibits the functioning of iodine. Iodine is an enzyme that is involved in the activation of T3 and T4. Increased activation of thyroid hormones due to excessive iodine enhances the process of hyperthyroidism. Therefore, iodimine medication will ensure that hyperthyroidism is under control.

Cimigine inhibits potassium/iodine cotransporter to enhance the management of hyperthyroidism. Potassium/iodine cotransporter enhances the formation of potassium iodide which is a stable form of iodine that prevents the uptake of iodine in the thyroid gland. The block enhances the prevention of iodine from accessing the thyroid following nuclear trauma. In hyperthyroidism, the cimigine will enhance the formation of the block which will prevent iodine uptake for the formation of thyroid hormone. Therefore, cimigine is a significant

medication in the treatment of hyperthyroidism. Aldoramine is a medication that will be great in enhancing the treatment of hyperthyroidism. Aldoramine inhibits the sodium/iodine cotransporter. The thyroid gland must concentrate iodide from the blood to enhance the production of thyroid hormones. Sodium iodide block does not distinguish the radioactive and normal iodide, which enhances a great chance for the treatment of hyperthyroidism (Trohman et al., 2020). The increased amount of radioiodine is significant in enhancing the management of hyperthyroidism which is seen in the pharmacodynamic of aldoramine. Ideally, aldoramine, iodimine, and cimigine enhance inhibition of the iodine cotransporter. Because iodine is the primary element in thyroid hormone production, its absence would enhance decreased production of thyroid hormone in hyperthyroidism. Thyromine is a drug that would be used to treat hypothyroidism as it enhances thyroglobulin production which is a hormone that enhances the synthesis of thyroid hormone. Increased thyroglobulin levels will enhance increased thyroid hormone production because it is a primary element for the production of thyroid hormones. Aldosine will also enhance the management of hypothyroidism by inhibiting the production of angiotensin. Reduced angiotensin level will enhance inhibition of angiotensin conversion which will increase the production of thyroid hormone thus enhancing management of hypothyroidism.

References

- Munoz, J. L. (2019). Fetal thyroid disorders: Pathophysiology, diagnosis, and therapeutic approaches. *Journal of gynecology obstetrics and human reproduction*, 48(4), 231-233.
- Trohman, R. G., Sharma, P. S., McAninch, E. A., & Bianco, A. C. (2019). Amiodarone and thyroid physiology, pathophysiology, diagnosis, and management. *Trends in cardiovascular medicine*, 29(5), 285-295.

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