

**INVESTIGATING HYPERTHYROIDISM: A COMPREHENSIVE
ANALYSIS OF PATHOGENESIS, DIAGNOSIS, AND MANAGEMENT**

Fayzullayev Elyor

4th year student of the pediatrics faculty of the Samarkand State Medical University

Fayzullayeva Shodiya

4th year student of the pediatrics faculty of the Samarkand State Medical University

Yaxshilikov Ahrorbek

4th year student of the pediatrics faculty of the Samarkand State Medical University

Objectives: Hyperthyroidism is a common endocrine disorder that is characterized by an overactive thyroid gland, leading to an increase in the production and secretion of thyroid hormones. The aim of this thesis is to provide a comprehensive analysis of hyperthyroidism, including its pathogenesis, diagnosis, and management.

Methodology: The first chapter will provide an overview of the pathophysiology of hyperthyroidism, including the different causes, mechanisms, and molecular pathways involved in the development of the disease. The second chapter will focus on the clinical presentation of hyperthyroidism, outlining the signs and symptoms associated with the condition, as well as the various diagnostic tests that are used to confirm the diagnosis.

Results: The third chapter will explore the different treatment options available for hyperthyroidism, including medication, surgery, and radioiodine therapy. In addition, the chapter will discuss the various factors that determine the choice of treatment, such as age, gender, severity of symptoms, and the underlying cause of the disease.

The fourth chapter will present the findings of a retrospective cohort study that investigated the effectiveness of different treatment modalities for hyperthyroidism. The study will focus on the outcomes of patients who underwent radioiodine therapy, thyroidectomy, and medical management, comparing the success rates, complication rates, and long-term outcomes of each approach.

Conclusion: This thesis will provide a detailed analysis of hyperthyroidism, offering insights into the pathogenesis, diagnosis, and management of the condition. The results of the retrospective cohort study will provide valuable information for clinicians and researchers in determining the most effective treatment strategies for patients with hyperthyroidism.

LITERATURE:

1. "Endocrinology: An Integrated Approach" by Stephen Nussey and Saffron Whitehead.
2. "The Endocrine System: An Integrated Approach" by Michael Hill.
3. "Clinical Endocrinology and Diabetes Mellitus" by Ramzi Ajjan.
4. "Contemporary Endocrinology" edited by Ashley Grossman.

