

Adult E-Poster

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TSH RECEPTOR ANTIBODY (TRAb) TESTING IN NON-PREGNANT ADULTS: AN AUDIT IN HOSPITAL TELUK INTAN

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INTRODUCTION

Determining the etiology of hyperthyroidism is essential for appropriate management, as different causes, such as Graves' disease, toxic multinodular goiter (MNG), and toxic adenoma, require distinct treatment approaches. Among these, Graves' disease is the most common autoimmune cause of hyperthyroidism, and TSH receptor antibody (TRAb) testing plays a crucial role in its diagnosis.

At Hospital Teluk Intan, TRAb testing is not available on-site and must be outsourced to Hospital Kuala Lumpur (HKL), located approximately 160 km away. Samples are sent twice a week, and results typically take up to two weeks. This audit aims to evaluate the number of TRAb tests performed in non-pregnant adults, analyze positive and negative results, and assess the workload and clinical significance of outsourcing this test.

METHODOLOGY

A retrospective audit was conducted from January to December 2024, including all non-pregnant adult patients (≥12 years) who underwent TRAb testing. Pregnant patients, pediatric cases, and those with incomplete data were excluded. Data was retrieved from laboratory records and patient files, focusing on test requests, positivity rates, and processing issues.

RESULT

A total of 111 TRAb tests were sent during the audit period. Of these, 64 (59.8%) were positive, supporting a diagnosis of Graves' disease, while 43 (40.1%) were negative. Four samples were rejected due to incomplete clinical summaries or the absence of a specialist's countersignature.

Analysis showed that TRAb levels did not correlate with disease severity when compared with thyroid function test (TFT) results.

CONCLUSION

This audit highlights the high demand for TRAb testing and the significant proportion of positive results. Given its diagnostic importance in differentiating Graves' disease

from other causes of hyperthyroidism, in-house TRAb testing at Hospital Teluk Intan would reduce delays and improve patient management. Establishing local testing capabilities could enhance efficiency, facilitate timely diagnosis, and optimize treatment planning.

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RENIN-ALDOSTERONE RATIO: AN AUDIT ON SAMPLES AND RESULTS IN HOSPITAL TELUK INTAN

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INTRODUCTION

Primary aldosteronism (PA) is an important yet often under-diagnosed cause of secondary hypertension. The renin-aldosterone ratio (RAR) serves as a key screening test for PA. This audit evaluates the number of RAR samples sent, their outcomes, and their implications for clinical practice over a three-year period from 2022 to 2024. As RAR testing is not available in Hospital Teluk Intan, all samples must be outsourced to Hospital Putrajaya, with an average turnaround time of approximately one month. The objective of this audit is to determine the number of RAR tests performed in Hospital Teluk Intan. Additionally, it seeks to analyze the proportion of positive and negative results and assess the adequacy of PA screening among hypertensive patients.

METHODOLOGY

This retrospective audit was conducted over a three-year period from January 2022 to December 2024. The study included all patients tested for RAR in Hospital Teluk Intan, while cases with incomplete results or missing data were excluded. Data was collected from laboratory records and patient files.

RESULT

Over the study period, a total of 48 RAR tests were conducted. In 2022, two cases tested positive while 18 were negative. In 2023, two cases were positive and 11 were negative. In 2024, one case was positive and 14 were negative. Among the five patients with positive results, two underwent adrenalectomy and subsequently recovered. Two patients declined further treatment due to advanced age and concerns about worsening kidney disease, while one patient remains under investigation.