Adult E-Poster

EP_A186

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

https://doi.org/10.15605/jafes.040.S1.194

Choon Peng Sun,[1] Nursyahirah Saleh,[2] Syazana Jan Shari[2]
[1]*Endocrine Unit, Medical Department Hospital Teluk Intan*
[2]*Biochemistry Unit, Pathology Department Hospital Teluk Intan*

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.

EP_A187

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

https://doi.org/10.15605/jafes.040.S1.195

Choon Peng Sun,[1] Nursyahirah Saleh,[2] Syazana Jan Shari[2]
[1]*Endocrine Unit, Medical Department Hospital Teluk Intan, Perak, Malaysia*
[2]*Biochemistry Unit, Pathology Department Hospital Teluk Intan, Perak, Malaysia*

INTRODUCTION

Primary aldosteronism (PA) is an important yet often underdiagnosed 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.

CONCLUSION
Although a significant number of RAR tests were performed, the majority yielded negative results, reinforcing the fact that primary aldosteronism remains a relatively rare condition compared to primary hypertension. The audit findings suggest that approximately one in ten tested cases were diagnosed with PA. These results highlight the importance of targeted screening to ensure appropriate patient selection for RAR testing, thereby optimizing resource utilization and timely intervention.

EP_A188

MELIOIDOSIS AND DIABETES MELLITUS IN HOSPITAL TELUK INTAN: AN AUDIT OF OUTCOMES AND THEIR ASSOCIATION WITH GLYCEMIC CONTROL

https://doi.org/10.15605/jafes.040.S1.196

Choon Peng Sun,[1] Nor Akmal Mokhtar,[2] Aida Syahirah Kamarudin[2]
[1]*Endocrine Unit, Medical Department, Hospital Teluk Intan, Perak. Malaysia*
[2]*Microbiology Unit, Pathology Department, Hospital Teluk Intan, Perak, Malaysia*

INTRODUCTION
Melioidosis, caused by Burkholderia pseudomallei, is endemic in tropical climates and poses a heightened risk to individuals with diabetes mellitus, particularly those with poor glycemic control. Diabetes is a well-established risk factor for severe melioidosis, often resulting in worse clinical outcomes. This audit aims to assess the prevalence, clinical outcomes, and the relationship between glycemic control and melioidosis in patients treated at Hospital Teluk Intan in 2024. Notably, 42 cases of melioidosis were reported in Perak during the year.

METHODOLOGY
A retrospective audit was conducted on all confirmed melioidosis cases from January to December 2024. Data was collected from medical records and laboratory databases. Key variables include patient demographics, HbA1c levels, site of infection, length of hospital stay, ICU admission, and mortality. Patients were stratified based on HbA1c levels to assess glycemic control.

RESULT
In 2024, a total of 16 melioidosis cases were reported at Hospital Teluk Intan. The majority of patients were male (13), with 3 female patients. The mean age was 55 years. Of the cases, 12 patients were Malay, 1 was Indian, and 3 were foreign nationals. The mortality rate was 37.5% (6 patients), while 10 patients survived, aligning with reported mortality rates of 10–40% for melioidosis.

Among survivors, the average hospital length of stay was approximately 20 days. Of the 6 mortality cases, only 1 patient received ICU care due to limited bed availability. Type 2 diabetes mellitus (T2DM) was present in 13 out of 16 cases, with a mean HbA1c of 12.2%. Notably, 3 patients were newly diagnosed with diabetes during admission.

Melioidosis was diagnosed through blood cultures in 13 cases, while 3 cases were confirmed via tissue or swab cultures. Only 6 patients reported working in soil-related occupations, while the rest were pensioners or unemployed. Beyond T2DM, 2 patients had chronic kidney disease (CKD), and 1 patient had an underlying gastrointestinal malignancy.

CONCLUSION
This audit provides valuable insights into the burden of melioidosis in diabetic patients and the impact of glycemic control on disease severity. The findings may inform future clinical practices, emphasizing the importance of optimizing diabetes management to reduce melioidosis-related morbidity and mortality.

EP_A189

UNRAVELLING AN UNRECOGNIZED CAUSE OF DIABETES DISTRESS AMONGST DIABETES PATIENTS DURING WORLD DIABETES DAY 2024 SCREENING INITIATIVE

https://doi.org/10.15605/jafes.040.S1.197

Pei Sun Tan, Sue Wen Lim, Xin Yi Ooi, Hui Chin Wong, Jean Mun Cheah, Idris Diah, Saieehwaran Menon, Sy Liang Yong
Hospital Tengku Ampuan Rahimah, Klang, Malaysia

INTRODUCTION
In observance of World Diabetes Day 2024, with the theme Diabetes and Well-being: Physical, Mental, and Societal Health, a screening was conducted to assess diabetes distress among patients at the diabetes clinic of Hospital Tengku Ampuan Rahimah, Klang.

METHODOLOGY
A total of 34 patients participated in the Diabetes Distress Scale (DDS-17) screening, either self-administered or assisted by diabetes educators with informed consent. DDS-17 assesses four subscales: Emotional Burden, Physician-Related Distress, Regimen-Related Distress, and Interpersonal Distress. A mean score ≥3 indicated signifi-