

RESULTS

The incidence of composite postoperative complications of in-hospital mortality, postoperative infection, and postoperative diabetes insipidus was significantly increased among those with preoperative steroids compared to those without (58.33% versus 33.33%, $p = 0.004$), with an adjusted odds ratio of 2.90 (CI: 1.29 to 6.53, $p = 0.010$). Among the components of the composite outcome, post-operative diabetes insipidus was statistically higher among those given preoperative steroids (52.45% vs 28.21%, $p = 0.006$) with an adjusted OR of 3.31 (CI: 1.43 to 7.67, $p = 0.005$). The incidence of postoperative adrenal insufficiency was similar between the groups (20.15% with steroids vs 8.70% without steroids, $p = 0.258$).

CONCLUSION

Among patients with normal preoperative HPA axis who underwent pituitary surgery, routine preoperative steroid use was associated with an increased risk of composite postoperative complications (in-hospital mortality, postoperative infection, postoperative diabetes insipidus).

KEYWORDS

pituitary-adrenal system, pituitary gland / surgery, postoperative complications, glucocorticoids, steroids

REPRODUCTIVE

OP-R-01

COMPARISON OF CARDIO-METABOLIC PARAMETERS BETWEEN THE DIFFERENT POLYCYSTIC OVARY SYNDROME PHENOTYPES AMONG FILIPINO WOMEN IN A TERTIARY HOSPITAL

<https://doi.org/10.15605/jafes.038.AFES.30>

Nichole Andrea Bisquera, Oliver Allan Dampil, Erick Mendoza, Yvette Manalo-Mendoza

St. Luke's Medical Center, Quezon City, Philippines

INTRODUCTION

Polycystic Ovary Syndrome (PCOS) is the most common endocrinopathy in reproductive-aged women. It affects fertility and is also associated with significant metabolic disturbances. Women diagnosed with PCOS may have a heterogeneous presentation. The International Evidence-based Guidelines for the Assessment and Management of PCOS in 2018 stated that the presentation and manifestations of PCOS may have ethnic differences. Knowledge of the ethnic differences in the phenotypic clinical and metabolic profiles may assist clinicians in the diagnosis and management of PCOS in specific populations.

METHODOLOGY

This single-center, prospective cross-sectional study was done on 142 reproductive-aged women (18-45 years old) with PCOS as diagnosed by Rotterdam criteria. Participants were recruited from Endocrinology Obstetrics and Gynecology clinics. Demographic data, obstetric and gynecologic history, co-existing medical conditions, medication history, vital signs, and anthropometric measurements were collected. The presence of clinical signs of hyperandrogenism was evaluated (hirsutism with mFG scores, acne, and alopecia). Results of 75-gram OGTT/FBS, lipid profile, fasting insulin, complete blood count, and transvaginal/transrectal ultrasound were collected. BMI, HOMA-IR, TG/HDL ratio, and Neutrophil-lymphocyte ratio (NLR) were computed. To determine the differences in mean, median, and frequency between phenotype groups, One-way ANOVA, Kruskal-Wallis test, and Fisher's Exact test were used, respectively.

RESULTS

A total of 142 participants were included in the analysis. Overall, the mean age was 30.57 years. The highest proportion among the study participants was phenotype A (37.32%). Clinical signs of hyperandrogenemia were highest in the hyperandrogenic phenotypes (A,B) ($p = 0.05$). Insulin resistance similarly was also comparable across phenotypes, however,, Phenotype A had the highest fasting insulin level (median 17, $p = 0.047$), and HOMA-IR values (median 4.70, $p = 0.048$). Phenotype A had the highest weight, and BMI across groups (median 82 kg, median 31.69 kg/m², $p = 0.023$, and $p = 0.032$, respectively). Markers of central adiposity (waist circumference and waist-to-hip ratio) were highest in Phenotype A, but were also elevated in the oligo-anovulatory phenotypes B and D ($p = 0.005$). Participants in phenotype D had significantly higher TG/HDL ratios. NLR scores were similar across all phenotypic groups (median 2, $p = 0.40$).

CONCLUSION

In conclusion, this study provides a comprehensive metabolic and phenotypic profile in a clinical population of adult reproductive-age Filipino women with PCOS. The most common phenotype is the classic/hyperandrogenic type, but a greater proportion of non-hyperandrogenic phenotypes in this population suggests a greater role of the presence of PCO morphology in the diagnosis. There is a high prevalence of obesity and central adiposity in Filipinos with PCOS. The oligo-anovulatory phenotypes (A, B, and D) present with greater metabolic dysfunction. Markers for adiposity and determination of insulin resistance should be included in the assessment of PCOS patients because these measures inform risk for development of co-morbidities, allow secondary prevention and help clinicians tailor long-term management of patients with PCOS.

KEYWORDS

PCOS, PCOS phenotypes, insulin resistance, hyperandrogenism, obesity

THYROID

OP-T-01

CLINICAL CHARACTERISTICS AND OUTCOMES OF AN EXOGENOUS THYROTOXICOSIS EPIDEMIC IN PRISON

<https://doi.org/10.15605/jafes.038.AFES.31>

Chidchanok Pattarawongpaiboon,¹ Nattachai Srisawat,² Ratapum Champunot,³ Jukrin Somboonjun⁴

¹Chulalongkorn University, Bangkok, Thailand

²Chulalongkorn University and King Chulalongkorn Memorial Hospital, Bangkok, Thailand

³Phitsanulok Provincial Public Health Office, Phitsanulok, Thailand

⁴Wang Thong Hospital, Phitsanulok, Thailand

INTRODUCTION

An outbreak of exogenous thyrotoxicosis is a very uncommon cause of thyrotoxicosis. Little is known about the clinical characteristics and outcomes in these situations. This study aimed to investigate the characteristics and outcome of exogenous thyrotoxicosis and electrolyte imbalance during an outbreak of exogenous thyrotoxicosis in Phitsanulok prison.

METHODOLOGY

This study collected prospective data during the outbreak of thyrotoxicosis among prisoners at Phitsanulok prison between 29 December 2019 and 17 January 2020. In the first phase, a total of 2,815 prisoners were screened for thyroid stimulating hormone (TSH), potassium levels, and pulse rate. In the second phase, 490 male prisoners were collected for thyroid function tests, serum electrolytes, and urine electrolytes. Thyroglobulin levels were measured in patients with thyrotoxicosis. A questionnaire was used to obtain signs & symptoms of thyrotoxicosis and other pertinent data.

RESULTS

The prevalence of subclinical hyperthyroidism was 78.1%. Four prisoners died, while 69 prisoners were admitted to the hospital. The pulse rate was significantly higher in the subclinical hyperthyroidism group. Weight loss, palpitation, muscle weakness, and fatigue were found predominantly in the subclinical hyperthyroidism group. The prevalence of hypokalemia was 38.4%, however, there was no difference between subclinical hyperthyroidism and normal TSH. The mean magnesium levels were significantly lower in the subclinical hyperthyroidism group. Hypokalemic patients showed potassium loss through the kidney and was related to hypomagnesemia. Almost all patients with extremely low TSH levels had low normal thyroglobulin levels. The frozen meat during the outbreak had higher levels of thyroid hormone compared to the control group.

CONCLUSION

This outbreak of thyrotoxicosis, likely due to exposure to exogenous thyroid hormone in frozen meat, raised awareness of nutritional problems in prison. The development of surveillance systems to prevent health outbreaks such as this is urgently needed.

KEYWORDS

hamburger thyrotoxicosis, exogenous thyrotoxicosis, nutrition in prison