

General Endocrinology

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CLINICAL, SURGICAL, AND HISTOPATHOLOGIC OUTCOMES OF FILIPINO PATIENTS WHO UNDERWENT ADRENALECTOMY IN A TERTIARY HOSPITAL IN CEBU, PHILIPPINES

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INTRODUCTION

Hormone-producing adrenal tumors, adrenal carcinomas and other adrenal diseases can be potentially cured with adrenalectomy. In the local setting, studies are often limited by a small sample size and inadequate patient data. This study aimed to determine the clinical and histopathologic characteristics and perioperative outcomes of patients who underwent adrenalectomy.

METHODOLOGY

This is a retrospective chart review study from January 2007 to June 2017 in a tertiary hospital in Cebu City, Philippines. Clinical profiles, types of surgery, and operative outcomes were determined. Comparative analysis of clinical profile, histopathologic features, and surgical outcome was done. Descriptive as well as appropriate inferential statistical methods were used to analyze the data.

RESULTS

A total of 31 patients who underwent adrenalectomy were included with the mean age of 45.7 [SD=17.1] years old and a 1:3 male to female distribution. The distribution of tumors was as follows: hormone-producing adrenal tumor (74.2%), malignant adrenal tumors (12.9%), and other benign lesions (12.9%). Among patients with hormone producing tumors, 39.1% had catecholamine excess, 34.8% had aldosterone excess, and 26.1% had cortisol excess. Hormone-producing adrenal tumors were common at age 20 to 40 years old while malignant tumors were more common among those above 40 years old (p -value=0.023). Stage 3 hypertension (p -value=0.010) and improvement of hypertension postoperatively (p -value=0.046) were more common among hormone-producing tumors. On the other hand, large tumor size (>4 cm) (p -value=0.011), blood loss needing blood transfusion (p -value=0.001), prolonged operation (p -value=0.046), and longer hospital stay (p -value=0.002) were common among those with malignant tumors. Open adrenalectomy was associated with significant blood loss needing transfusion (p -value=0.001) and prolonged hospital stay (p -value=0.024).

CONCLUSION

Hormone-producing adrenal tumors with secondary hypertension are the most common pathology among patients who underwent adrenalectomy. They are usually seen among patients less than 40 years old, with smaller tumor size, and frequently present with higher blood pressures that improve following adrenalectomy. In contrast, adrenal carcinomas are more common among patients above 40 years old and have larger tumor size. More often they have prolonged operation time, greater blood loss, and longer hospital stay. Patients who underwent open adrenalectomy had more blood loss and had a longer hospital stay than those who underwent laparoscopic surgery.

KEYWORDS

hormone-producing adrenal tumors, functioning adrenal tumors, adrenal carcinoma, adrenalectomy, adrenal-dependent secondary hypertension