Clinical, Biochemical, Tumoral and Mutation Profile of Vhl and Men 2a Associated Pheochromocytoma: A Comparative Study
Amit Agarwal, MD, FACS, Mallika Dhanda, MD
SGPGIMS, Lucknow, India

INTRODUCTION: Few studies have compared VHL-PCC to MEN2A-PCC. Study of various features may help in guiding surgical management and surveillance of PCC in these 2 hereditary syndromes

METHODS: The retrospective cohort consists of 47 patients with biochemical and histologically proven PCC/PGL: 29 associated with VHL and 18 associated with MEN2A

RESULTS: There were more children <19 years in VHL group (13 vs 1). Despite majority of VHL-PCC showing elevation of NMN (93%) as compared to MEN2A-PCC (22.2%), 75.8% presented with hypertension as compared to MEN2A (33.3%). The average size of VHL-PCC tumors was 5.66cm. VHL-PCC as compared to MEN2A-PCC were multifocal (75% vs 61.1%), bilateral synchronous (72.4 vs 61.1%) and extra-adrenal (17.2% vs 0%). Both VHL (24%) and MEN2A-PCC (27.7%) showed multiple nodules but more MEN2A PCC showed extra-tumoral hyperplasia (44.4% vs 6.8%). In VHL, the commonest mutation(n=17) was miss-sense mutation with a hot spot on exon 3 while in MEN2A- PCC majority (66.6%) had 634 mutation in exon 11 and only 2 patients had the rare 611 mutation in exon 10.

CONCLUSION: Unlike previous studies which suggested small, asymptomatic tumors are unique features of VHL-PCC, our study suggests VHL can be symptomatic and large and that the it is the natural history of VHL-PCC to grow. A multifocical PCC is more likely to be VHL associated PCC. Our study brings out the point that presence of multiple nodules in VHL may be responsible for late recurrences after a sub-total adrenalectomy.

Safety of Thyroidectomy in Hospitalized Patients: A Propensity Score-Matched Analysis of the NSQIP Thyroidectomy-Targeted Data
George A Taylor, MD, MS, Swathi Raman, MPH, Sarah M Kling, MD, Huqing Zhao, PhD, MS, Lindsay E Kuo, MD, MBA, FACS
Temple University Hospital, Philadelphia, PA
Lewis Katz School of Medicine at Temple University, Philadelphia, PA

INTRODUCTION: Thyroidectomy is commonly performed electively on an outpatient basis. Some patients receive thyroidectomy while inpatients, hospitalized for an independent or related indication. Surgical outcomes have not been described in this group.

METHODS: The 2016-2018 thyroidectomy-targeted NSQIP datasets were combined. Patients admitted for ≥1 day prior to surgery were identified. Following sensitivity analysis, 3:1 propensity score matching based on comorbidities was employed to assess differences in outcomes between patients admitted ≥1 day prior to surgery vs all others. Surgical and thyroidectomy-specific outcomes were analyzed. Multivariable logistic regression analyzed factors associated with poor outcomes.

RESULTS: Of 18,078 patients, 312 were admitted at least 1 day prior to surgery. After propensity score matching, inpatients had higher ASA classifications (p<0.01). Already hospitalized patients had higher rates of overall complications (39.0% vs 19.4%, p<0.01), pneumonia (3.2% vs 0.7%, p<0.01), unplanned postoperative intubation (2.6% vs 0.7%, p=0.01), and cardiac arrest (1.3% vs 0%, p=0.01). These patients also experienced higher rates of thyroidectomy-specific complications such as recurrent laryngeal nerve injury/dysfunction (13.9% vs 8.0%, p<0.01), clinical events related to hypocalcemia (6.5% vs 3.0%, p=0.01), and neck hematoma (4.2% vs 1.5%, p=0.01). By multivariable regression, admission prior to surgery was significantly associated with development of any complications (OR 2.21, 95% CI 1.61 - 3.03, p<0.01).

CONCLUSION: Thyroidectomy in hospitalized patients carries an increased risk of complications compared to thyroidectomy in outpatients. Patients requiring thyroidectomy while hospitalized for any indication should be counseled appropriately.

Single Institutional Experience in Minimally Invasive Transperitoneal Adrenalectomy: A Series of 544 Cases Over 10 Years
Andreas Polycarpou, MD, Aliya Sada, MD, Benson Dy, MD, FACS, Melanie Lyden, MD, FACS, Trenton Foster, MD, Irina Bancos, MD, Travis McKenzie, MD, FACS
Mayo Clinic, Rochester, MN

INTRODUCTION: While minimally invasive adrenalectomy is safely performed for most patients, conversion to open surgery may still be required. Risk factors that predict conversion to open remain unclear. We aimed to analyze our experience in laparoscopic and robotic-assisted transperitoneal adrenalectomy to evaluate factors associated with conversion to open surgery.

METHODS: A retrospective review of minimally invasive transperitoneal adrenalectomies (2009-2018) was conducted. Patients’ and procedures’ factors were compared between groups using Fisher’s Exact and Wilcoxon Rank Sum tests, and multivariable analysis. Numeric data were summarized as mean±SD.

RESULTS: 544 patients were included; 19 (3.5%) required conversion to open, while 525 (96.5%) underwent minimally invasive surgery (90% laparoscopic, 10% robotic). “Difficult dissection” was the most cited indication for conversion (14/19). Estimated blood loss, operative time, and rate of intraoperative transfusion requirement were significantly higher in the