Parental decisional regret and views about optimal timing of female genital restoration surgery in congenital adrenal hyperplasia.

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PURPOSE: The role of female genital restoration surgery (FGRS) in girls with congenital adrenal hyperplasia (CAH) is controversial, with no long-term parent-reported outcomes available. Decisional regret (DR) affects most parents after their children's treatment of pediatric conditions, including hypospadias. We aimed to assess parental DR after FGRS in infancy or toddlerhood and explore optimal timing for surgery.

MATERIALS AND METHODS: One-hundred and six parents of females with CAH undergoing FGRS before 3 years old and followed at our institution (1999-2017) were invited to enroll online. Higher Decision Regret Scale (DRS) scores indicated greater DR (range 0-100). Participants also reported preferred FGRS timing relative to their surgery (earlier, same, later/delayed). Non-parametric statistical tests were used.

RESULTS: Thirty-nine parents (median 4.4 years after FGRS) participated (36.8% response rate). Median age at FGRS was 9 months. Median DRS score was 0 (mean: 5.0). Overall, 20.5% of parents reported some regret (all mild-moderate) (Figure). Fewer parents reported DR after FGRS compared with published DR after hypospadias repair (50-92%, p ≤ 0.001) or adenotonsillectomy (41-45%, p ≤ 0.03). No parent preferred delayed FGRS. Seven parents (18.1%) preferred earlier surgery, especially when performed after birthday (80.0% vs. 8.8%, p = 0.004).

DISCUSSION: We present the first report of validated long-term parent-reported outcomes after FGRS in infant and toddler girls with CAH. One limitation is that this is largely a single surgeon series. Reasons for the observed low levels of DR are likely multifactorial. Far from a definitive study, we aimed to provide parents willing to share about their experience an opportunity to do so. For that reason, selection bias may exist in our study. While parents with higher DR were potentially less likely to participate because of mistrust of the medical establishment, those with a negative experience may in fact be more likely to voice their opinions. A low participation rate was likely a result of the sensitive nature of FGRS, a desire for privacy, and inability to locate parents. A larger study will be required to assess how DR is affected by sexual function, genital appearance and complications, and DR among women with CAH.

CONCLUSIONS: Parents of females with CAH report low levels of DR after FGRS in infancy and toddlerhood. This appears to be lower than after other genital and non-genital pediatric procedures. When present, parental DR is usually mild. No parents preferred delayed surgery, even among those with DR. Some preferred earlier surgery.

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Laparoscopic Versus Open Adrenalectomy for Localized/Locally Advanced Primary Adrenocortical Carcinoma (ENSAT I-III) in Adults: Is Margin-Free (R0) Resection the Key Surgical Factor that Dictates Outcome?-A Review of the Literature.

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BACKGROUND: The aim of this study was to review the current literature on the role of laparoscopic adrenalectomy (LA) in the treatment of primary adrenocortical carcinoma (ACC; European Network for the Study of Adrenal Tumors [ENSAT] I-III) in adults.

MATERIALS AND METHODS: Nonrandomized controlled trials published between January 1999 and February 2017 were identified by searching the Pubmed, EMBASE, Cochrane Library, and Google Scholar databases. Primary and secondary endpoints included surgical and pathological parameters (patients age, tumor size, ENSAT stage, type of surgical approach, and period of follow-up), surgical outcomes (operative time, estimated blood loss, length of hospital stay, conversion rate to laparotomy, R0 resection, and surgical margin's status), and oncological outcomes (rate of recurrence, disease-free survival [DFS], and overall survival [OS] rates).

RESULTS: A total of 13 studies encompassing data on 1171 patients were included in the review. Compared with open approach, LA demonstrated lower tumor size, shorter operative time, lower intraoperative blood loss, shorter postoperative hospital stay, and equivalent local recurrence rates. No significant differences were observed between groups treated with an open or laparoscopic approach for the following criteria: R0 surgical resection status, tumor overall recurrence, and postoperative DFS and OS rates.

CONCLUSIONS: LA appears to be equivalent to open method for localized/locally advanced primary ACC (ENSAT I-III) in terms of R0 resection rate, overall recurrence, DFS, and OS, therefore suggesting that the extent of surgery with adequate tumor resection is the predominant endpoint, rather than the surgical approach itself. Multicenter randomized controlled trials with long follow-up time periods exploring the long-term oncological outcomes are required to determine the benefits of the laparoscopic over the open approach in adrenocortical carcinoma.

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Is Pterygopalatine Fossa Injection with Adrenaline an Effective Technique for Better Surgical Field in Fess?

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Functional endoscopic sinus surgery (FESS) is one of most common surgeries in otorhinolaryngology practice. It is done in the narrow confines of the nasal cavity. Bleeding into the surgical field is a major problem faced by endoscopic surgeons. To assess the effectiveness of pterygopalatine fossa infiltration with lignocaine and adrenaline in controlling surgical field bleeding during endoscopic sinus surgery. A randomized blinded study was done among 68 patients who underwent FESS. Infiltration with 2% lignocaine with 1:80,000 adrenaline was given only on one side and the surgeon was blinded as to which side was infiltrated and he was asked to assess the surgical field using a standard scale. There was statistical significant improvement in surgical field on the infiltrated side (p = 0.001) with almost 25-30% improvement in surgical field on the infiltrated side. The surgical field bleeding also varied with the blood pressure with a positive correlation. There were no complications associated with the procedure. Pterygopalatine fossa infiltration with lignocaine and adrenaline is an effective technique in reducing surgical field bleeding during FESS. It can be combined with nasal decongestion or hypotensive anaesthesia for an optimum surgical field.

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Conflict of interest statement: Compliance with Ethical StandardsThe authors declare that they have no conflict of interest. All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards. Informed consent was obtained from all individual participants included in the study.

Preoperative genetic testing in pheochromocytomas and paragangliomas influences the surgical approach and the extent of adrenal surgery.
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BACKGROUND: Our knowledge of the susceptibility genes for pheochromocytomas/paragangliomas has increased; however, data on its impact on surgical decision-making has not been described. The aim of this study was to determine the effect of routine preoperative genetic testing on the operative intervention in patients with pheochromocytomas/paragangliomas.

METHODS: One-hundred-eight patients diagnosed with pheochromocytomas/paragangliomas who underwent 118 operations had preoperative genetic testing for 9 known pheochromocytoma/paraganglioma susceptibility genes. A retrospective analysis of a prospective database was performed to evaluate clinical factors associated with the surgical approach selected and the outcome of the surgical intervention.

RESULTS: In 51 patients (47%), a germline mutation was detected and one-third had no family history of pheochromocytoma/paraganglioma. In 77 operations (65%), it was the first operative intervention for the disease site (60 laparoscopic, 17 open), and 41 (35%) were reoperative interventions (36 open, 5 laparoscopic). For initial operations, variables associated with whether an open or laparoscopic approach was used were tumor size (P = .009) and presence of germline mutation (P = .042). Sixty-eight adrenal operations were performed (54 total, 14 cortical-sparing). Variables significantly associated with a cortical-sparing adrenalectomy being performed were the presence of germline mutation (P = .006) and tumor size (P = .013).

CONCLUSION: Preoperative knowledge of the germline mutation status affects the surgical approach and extent of adrenalectomy.

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BACKGROUND: An association has been suggested between increasing surgeon volume and improved patient outcomes, but a threshold has not been defined for what constitutes a "high-volume" adrenal surgeon.

METHODS: Adult patients who underwent adrenalectomy by an identifiable surgeon between 1998-2009 were selected from the Healthcare Cost and Utilization Project National Inpatient Sample. Logistic regression modeling with restricted cubic splines was utilized to estimate the association between annual surgeon volume and complication rates in order to identify a volume threshold.

RESULTS: A total of 3,496 surgeons performed adrenalectomies on 6,712 patients; median annual surgeon volume was 1 case. After adjustment, the likelihood of experiencing a complication decreased with increasing annual surgeon volume up to 5.6 cases (95% confidence interval, 3.27-5.96). After adjustment, patients undergoing resection by low-volume surgeons (<6 cases/year) were more likely to experience complications (odds ratio 1.71, 95% confidence interval, 1.27-2.31, P = .005), have a greater hospital stay (relative risk 1.46, 95% confidence interval, 1.25-1.70, P = .003), and at increased cost (+26.2%, 95% confidence interval, 12.6-39.9, P = .02).

CONCLUSION: This study suggests that an annual threshold of surgeon volume (≥6 cases/year) that is associated with improved patient outcomes and decreased hospital cost. This volume threshold has implications for quality improvement, surgical referral and reimbursement, and surgical training.

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BACKGROUND: Esophageal carcinomas are highly malignant tumors with a high frequency of lymph node and distant organ metastasis. Treatment for recurrent tumors is generally decided on an individual basis. Although multidisciplinary treatments involving chemotherapy, surgical resection, and radiation are performed, the prognosis remains poor. Here, we report a case of prolonged recurrence-free survival (38 months) after esophageal carcinoma surgery and subsequent laparoscopic adrenalectomy for right adrenal metastasis.

CASE PRESENTATION: An 83-year-old man was diagnosed with type 3 esophageal squamous cell carcinoma (T3N1M0, cStage IIIA, UICC-7), spreading from the lower thoracic esophagus to the abdominal esophagus. He underwent thoracoscopic esophagectomy with a two-field lymph node dissection followed by substernal gastric tube reconstruction. The final diagnosis was moderately differentiated squamous cell carcinoma (T3N2M0, fStage IIIB). Adjuvant chemotherapy was not administered because of the advanced age and postoperative condition of the patient. Computed tomography (CT) at 14 months postoperatively showed a mass with a 2-cm diameter at the right adrenal gland. Positron emission tomography (PET)/CT revealed a high fluorodeoxyglucose (FDG) uptake in the mass. It was suspected that the mass was a metastatic lesion secondary to the primary esophageal carcinoma. No metastases to lymph nodes or other distant organs were identified. The patient underwent laparoscopic right adrenalectomy. The histopathological examination revealed moderately differentiated squamous cell carcinoma, suggesting metastasis from the primary esophageal carcinoma. He has survived without recurrence for 38 months since laparoscopic adrenalectomy to remove the right adrenal metastatic mass after the esophageal carcinoma surgery.

CONCLUSIONS: We describe a very elderly male who survived laparoadrenalectomy for right adrenal metastasis following esophageal cancer surgery without recurrence for 38 months postoperatively. Therefore, surgical resection might be an option for solitary adrenal recurrence.

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