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**Introduction & Objectives:** To share our experience in adrenalectomy in patients with adrenal gland metastatic lesion. Adrenal gland takes the 4th place after lungs, liver and bones as to solid metastasis frequency. Adrenal gland metastatic lesion (AGML) is diagnosed in 9-27% of cases of other malignant tumors; very often metastasis can be bilateral. AGML is on the second place among all adrenal gland tumors, giving place to adenomas.

**Materials & Methods:** In two our departments from January 2010 to July 2018, 52 operations on adrenal glands were performed, including 31 laparoscopic adrenalectomies (LAE), 4 open adrenalectomies (OA), 17 laparoscopic partial adrenalectomies (PLA). Out of patients who had adrenalectomy, we had 10 cases of AGML-related surgeries. Median age was  $56 \pm 5$  years. Gender breakdown: 8 males (80%), 2 females (20%). AGML was detected during a follow-up of primary malignant tumor. Contrast Abdomen CT was performed. Median period between diagnosing AGML and a surgery was 7 (3-15) days. Preoperative Ultrasound was performed in all patients to control AGML size. In one case, when perioperative period was 14 days, control CT and Ultrasound recorded AGWL growth by 36%.

**Results:** The surgery made it possible to detect an evident local adhesion process, which was not established in the case of adrenalectomy in primary malignant metastatic tumours. For AGML patients, LAE was performed in 9 (90%) cases; in 1 (10%) case, we performed open nephroadrenalectomy to a patient with fast metastatic growth and the evident local adhesion process with major renal vessels involvement. The average blood loss made 80 ml (50-250 ml). The average surgery time was 125 min (60-90 min). Histological examination of 10 AGMLs revealed 9 (90%) lung tumour metastases and 1 (10%) case of uterine cancer. The average size of metastases was 50 mm (40-95 mm). The right-sided AGML was found in 3 cases, while the left-sided AGML was observed in 7 cases. Histological examination of the group with AGML-lung metastases detected 5 cases of median grade adenocarcinoma, 2 cases of anaplastic cancer and 2 cases of squamous cell carcinoma. Uterine cancer is a 100% median grade carcinoma. No symptoms of hypocorticismus were detected in any of the groups. No postoperative complications were detected.

**Conclusions:** It is very important to understand that AGML tends to grow very fast, which has been demonstrated in our investigation. Taking into account the frequency of AGML and its asymptomatic progression, we have to emphasize the need for a careful follow-up of oncological patients in order to promptly detect and treat the disease before it becomes a generalized process. Despite its fast growth and adhesion process, LAE can be safely performed in most patients with AGML.