

## RESULTS SIMULTANEOUS OPERATIONS IN PATIENTS WITH ADRENAL TUMORS

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### Annotation

In the period from 2013 to 2015 the 2-clinic of Tashkent Medical Academy for examination and treatment were 46 patients with adrenal tumors. Simultaneous operations were performed in 6 patients, of whom 4 women and 2 men. A morphological study of adrenal tumors, we found: 2 - aldosteroma (33.3%), 1 - pheochromocytoma (16.6%), 1 - adrenal cyst (16.6%), 2 - cortex adenoma (33.3%). Of these, 50% patients were with intsidentaloma (2 cortical adenoma and 1 adrenal cyst). Indications for simultaneous operations were a combination of adrenal tumors with cholelithiasis and umbilical hernia. At the same time in 4 (66.6%) patients simultaneously conducted operations - right-sided laparoscopic adrenalectomy, and laparoscopic cholecystectomy, in 1 patient (16.6%) - a left laparoscopic adrenalectomy and laparoscopic cholecystectomy and 1 (16.6%) patient's after adrenalectomy surgery hernia repair is made to the type of allopath «on lay».

In postoperative period complications were not observed. On the next day after surgery drains removed and all patients are activated. Average bed day was  $4 \pm 1,71$ . Thus, the analysis of these patients treatment results showed that the duration of surgery and hospital stay do not differ from similar parameters specific to patients with isolated surgical pathology. Treatment simultaneously several surgical diseases liquidate of need for repeated operations and its risk of possible complications. All of the above underscores the feasibility and cost-effectiveness of performing simultaneous operations in patients with concomitant surgical pathology.

**Key words:** tumor of adrenal glands, simultaneous operations, laparoscopic adrenalectomy.

About 20-30% of the patients, who enter surgical departments, have 2 or 3 diseases, which ought to be operated. We analyzed 6 simultaneous operations performed with the patients, who suffered from both adrenal tumor and other kind of surgical disease. The approach choice and the order of stage during the operation are discussed.

Actual problems of modern surgery are the surgical treatment of arterial hypertension. At the moment 35% of patients the cause of high blood pressure is symptomatic hypertension, of whom 15-25%, it is the consequence of endocrine hypertension adrenal genesis [2,6]. At the same time, timely diagnosis of these diseases and timely initiation of treatment in most cases leads to the recovery of patients [1,9]. So far, 1/3 of patients diagnosed with symptomatic hypertension due to adrenal tumors, established no earlier than 5 years [7,10]. This "delay" timing of treatment on the back of improved diagnostic capabilities of modern medical institutions leads to the fact that 20-30% of patients admitted to a surgical hospital, diagnosed 2-3 diseases requiring surgical treatment [5,9]. This situation is particularly relevant for patients with adrenal incidentaloma - formations found on imaging studies of the abdomen

and retroperitoneal space over, not associated with adrenal pathology [3,4,8,10]. Recent achievements in surgery and anesthesiology created real conditions for performing simultaneous operations allowing simultaneously hold multiple surgical correction of diseases in one patient. Thus, the surgeon naturally raises the question of the choice of adequate access and optimal phasing surgery [1,2].

Objective: To study the ability to perform simultaneous operations in patients with adrenal tumors, during the early postoperative period; make recommendations about the choice of surgical tactics.

#### MATERIALS AND METHODS

In the period from 2013 to 2015 the 2-clinic of Tashkent Medical Academy for examination and treatment were 46 patients with adrenal tumors. Among them 34 women and 12 men aged 19 to 74 years. The mean age was  $42,9 \pm 2,6$  years. All patients were operated. In order to clarify the hormonal activity of adrenal tumors in plasma and urine were determined catecholamine's and their metabolites, DGEA, cortisol, 17-OKS, 11 -OXS, 17-KS, ACTH, androgens and estrogens, renin.

Simultaneous operations were performed in 6 patients, of whom 4 women and 2 men. A morphological study of adrenal tumors, we found: 2 - aldosteroma (33.3%), 1 - pheochromocytoma (16.6%), 1 - adrenal cyst (16.6%), 2 - cortex adenoma (33.3%). Of these, 50% patients were with insidentaloma (2 cortical adenoma and 1 adrenal cyst). Indications for simultaneous operations were a combination of adrenal tumors with cholelithiasis and umbilical hernia. At the same time in 4 (66.6%) patients simultaneously conducted operations - right-sided laparoscopic adrenalectomy, and laparoscopic cholecystectomy, in 1 patient (16.6%) - a left laparoscopic adrenalectomy and laparoscopic cholecystectomy and 1 (16.6%) patient's after adrenalectomy surgery hernia repair is made to the type of allopath «on lay».

#### RESULTS AND DISCUSSION.

In considering the possibility of conducting simultaneous operations in patients with tumor pathology of the adrenal glands, we used differential tactics. So if in patients with suspected pheochromocytoma in the during of adrenalectomy if we have observed pronounced hemodynamic disorders, in this case we refused from simultaneous operations for fear of uncontrolled hypotension. In addition, when we are having plan for simultaneous operations on a mandatory basis were assessed operational risk. At the same time in patients with a high degree of operational risk by performing simultaneous operations rather give up and when the patients with a low and moderate degree of operational risk of appropriateness of simultaneous operations is not in doubt.

At the stage of preparation of patients for surgery therapeutic activities included: correction of blood pressure and treatment of heart disease, compensation of carbohydrate and electrolyte metabolism, treatment of opportunistic diseases and sanitation of the chronic centers of infection. In all cases, the determining factors of priority of surgical intervention are compliance with the principles of asepsis, antisepsis and ablation. When performing simultaneous operations, it is desirable in the first place to carry out the most "pure" and most difficult stage of the operation. The most common comorbidities about which made simultaneous operations were chronic calculus cholecystitis. When we have performed laparoscopic adrenalectomy and laparoscopic cholecystectomy the first phase of the operation began with adrenalectomy, regardless of the side of the adrenal lesions.

Adrenalectomy was performed by transabdominal lateral access, and pneumoperitoneum imposed on safe methods. In 3 cases, after right-sided adrenalectomy position patients and

place trocars has not changed, in one case because of the technical difficulties of the patient is laid on his back and carried cholecystectomy surgery. Mean operative time was  $139 \pm 9,5$  min. Only in one case produced simultaneous laparoscopic left adrenalectomy and cholecystectomy, when it became necessary to change the position of patient and install a few extra "ports". There operative time was 151 minutes.

In postoperative period complications were not observed. On the next day after surgery drains removed and all patients are activated. Average bed day was  $4 \pm 1,71$ . Thus, the analysis of these patients treatment results showed that the duration of surgery and hospital stay do not differ from similar parameters specific to patients with isolated surgical pathology. Treatment simultaneously several surgical diseases liquidate of need for repeated operations and its risk of possible complications. All of the above underscores the feasibility and cost-effectiveness of performing simultaneous operations in patients with concomitant surgical pathology.

## CONCLUSIONS

1. In patients with adrenal tumors and concomitant surgical pathology possible to carry out simultaneous operations, with the prerequisite of their implementation should be an assessment of the operational and anesthesia's risk before surgery.
2. When performing surgical intervention on the abdominal organs and retroperitoneal space in a patient with adrenal tumors advisable to perform adrenal surgery the first stage.
3. Stages perform surgery is an important factor in the success of simultaneous treatment of several pathologies in patients with adrenal tumors.
4. Simultaneous operations are cost-effective, allowed for patients during the one hospitalization and one general anesthesia to relieve from two or three diseases.

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