

16.5±0.60 mm. In 10% relatively large microlites (up to 30-35 µm) were found with obturation of the lumen of the collecting tubules. Noted decreased expression (1+) of SOD-2 in epitheliocytes. The weakening expression of the antioxidant enzyme was accompanied by a statistically significant elevation of lipid peroxidation products (2+). With using of α-tocopherol in the experiment, a much smaller intensity of histopathological kidney restructuring was determined. The moderate amount (up to 17.6±2.39 in the field of view) of calcium compounds were small, averaging 5.40±0.28 mm in size. Large compounds of calcium, obturation clearance tubules and collecting tubules, or inlays their epithelium were not detected. Immunohistochemical study of the rat kidney during treatment with α-tocopherol showed moderate (2+) expression of the SOD-2 in epitheliocytes of the collecting tubules, comparable to the intact group and significantly (12.5%) higher than in animals with an experimental model oxalate nephrolithiasis. The intensity of the expression of MDA was similar to that in the intact group and significantly lower in animals with the experimental oxalate nephrolithiasis.

Conclusion: During the simulation of the experimental oxalate nephrolithiasis in the rat kidney, marked morphological signs of oxidative damage activation in the tissues and cells and a weakening of the enzymatic antioxidant defense system, accompanied by an acceleration lithogenesis were noted. The usage of antioxidants has beneficial effects on the renal morphologic reorganization, as it reduces the degree of oxidative damage to the cells and tissues, while it helps to reduce the number and size of the calcium deposits formed.

Key words: nephrolithiasis, free radical oxidation.

EXTRACORPOREAL SHOCK WAVE LITHOTRIPSY (ESWL) – EXPERIENCE OF THE DEPARTMENT OF UROLOGY REPUBLICAN CLINICAL HOSPITAL

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Introduction: In present days, in Republic of Moldova, extracorporeal shock wave lithotripsy (ESWL) is a usual form of treatment for renoureteral lithiasis. The purpose of this work is to evaluate the results after treatment of urolithiasis with extracorporeal shock wave lithotripsy in our clinic.

Material and Methods: During August 2011 – December 2011, a number of 190 patients were treated by ESWL for renoureteral lithiasis and a number of 243 treatment procedures were performed. The device we have is a second generation MODULITH® SLK lithotripter, with radiological and ultrasonographic localization system. In a number of 115 patients the localization of calculi was renal (60,52%), in 75 cases (39,47%) was ureteral localization.

Results: In a number of 120 patients (63,15%) ESWL was the single method used for therapy. A number of associated methods of treatment (percutaneous nephrostomy, ureteral catheter,) was necessary for 25 patients (13,15%). ESWL was made in 10 patients with a single kidney (5,26%). 40 (21,05%) patients were necessary two treatments, with in 3 (1,57%) patients three treatments or more were used. Severe complications occurred in 11 % cases (sepsis, anuria, perirenal hematoma, steinstrasse, etc.)

Conclusions:

1. ESWL is a very common method of treatment of renoureteral lithiasis and indication of primary treatment is about 70%.

2. Associated methods (percutaneous nephrostomy, autostatic ureteral catheter, etc) were necessary

before or after the procedure in case of non fragmentation or complications.

3. Severe complications lead to a adequate therapy (internal or external drainage of urinary system in urosepsis), and in the perirenal hematoma in evolution - open surgery.

Keywords: extracorporeal shock wave lithotripsy, experience, patients.

SURGICAL CORRECTION OF FALSE CONGENITAL DIAPHRAGMATIC HERNIAS IN CHILDREN BY MEANS OF ANATROPIC OSTEOTOMY

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Introduction: Congenital diaphragmatic hernias (CDH) belong to the group of vitally dangerous defects of development of respiratory system accompanied by heavy derangements of respiratory, cardiovascular, nervous systems and the organs of gastrointestinal path. According to scientific works in this field the frequency of this anomaly is very high - 1 case on 2000-4000 newborns, including mortinatus. The lethality at the pathology has been quite high, it averages 18-33,4%. Despite significant achievements in the treatment of CDH, surgical treatment still is the most effective method, consisting in clearing pleural cavity of hernial contents with the further liquidation of the diaphragmatic defect. However, even among the children operated in due time the lethality is 40-60 %. Timeliness, the choice of surgical interfere, method and techniques of a plasticity of the diaphragm, the liquidation of *visceroabdominal disproportion* and of the respiratory distress, the prevention of postoperative complications still are controversial points. All this requires the search of the new surgical approaches, the development of which is impossible without an adequate experimental model of the diaphragmatic hernia.

Objective: The purpose of the work is to develop an experimental model of a false diaphragmatic hernia on dogs with the possibility of the further surgical correction with the application of anatomic osteotomy.

Materials and methods: Surgical interfere was carried out upon 12 mongrels aged from 1 to 2 months. After the survey X-radiography of the organs of thoracic and abdominal cavities, animals received the combined intravenous narcosis supplemented with endotracheal intubation. Further on the edge of the left costal arch laparotomy was carried out. Having provided access to the left dome of a diaphragm, the superposition of ligature for fixing was carried out, between which a big rag in the form of a triangle was cut. Through the formed defect the loops of the small intestine were introduced into the pleural cavity and fixed at the level of gate of the created diaphragmatic hernia by the sero-muscular sutures. The pleural cavity was draining. The wound of the anterior abdominal wall was *layer* by layer stitched up in separate nodal tight sutures. In 2 hours after the end of surgery investigation a control survey X-radiography was carried out. Considering the fact that the created model of the diaphragmatic hernia has to resemble the natural one as much as possible, the second stage of surgery investigation was carried out a month later.

Under the combined intravenous narcosis in the projection of the 6th rib of the animals thoracotomy was carried out. Having removed fixation sutures, small intestine loops were displaced to the pleural cavity. Having found the 6th rib, the soft fabrics were dissected *layer* by layer to a rib with dissection periosteum, its mobilization and performance triangular osteotomy, with the further renewal of integrity periosteum. Then the edges of gate diaphragmatic hernia was stitched with U-shaped suture and the defect in the diaphragm was consistently sewn up, its edges pulled together without tension.