GUA-41 Features of diagnosis and treatment of echinococcosis of kidneys

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Background: Isolated kidney damage with echinococcosis is detected in 2–3% of cases and pathology is recognized in the presence of various complications, the frequency of which varies from 15% to 52% of cases. The reliability of the results of ultrasonography (US) is low. Multispiral computed tomography (MCT) does not allow you to visualize the nature of the soft tissues of the cyst, so it is impossible to determine the nature of the pathology. The most appropriate and affordable method is magnetic resonance imaging (MRI). The aim of the study is to study the results of a comprehensive examination and treatment of patients using modern radiological and immune studies.
Methods: A study of the results of examination and surgical treatment of patients with renal echinococcosis for the period from January 2012 to December 2018 was carried out. All patients underwent US, CT, MCT, MRI and of enzyme immunoassay (determine antibody units-AE) to detect echinococcosis.
Results: Of the 53 patients, 41 (77.3%) were men and 12 (22.6%) women. The average age of the patients was 48.2 ± 2.8 years. Eosinophilia was detected only in 38 (71.7%) patients; according to enzyme immunoassay data, positive results were obtained in 44 (83%) cases, the average value was 2.5 ± 0.3 AE (normal 0.36 AU). To characterize the changes in the cyst, a classification proposed by H.A. Gharbi was used. A "positive result" was considered when changes in the cyst related to types II–V were detected, which are most characteristic of a parasitic pathology. It was possible to establish a reliable diagnosis with the help of US only in 15 (28.3%) cases, according to MRI, in the presence of signs of types II–III in 38 (71.6%) cases. Despite the fact that "positive" results with the use of MCT were 33.9% (18 patients), nevertheless, the advantage of this method was the possibility of detecting a calcified capsule of an echinococcal cyst. When using MRI, other no less pathognomonic and highly reliable symptoms characteristic of echinococcosis were revealed, such as detachment of the chitinous membrane (in 20.7% of cases), the presence of daughter cysts and septa in its lumen (in 20.3% of cases). Traditional surgical intervention was performed in 48 (90.5%) cases. Removal of the chitinous membrane with the contents of the cyst, and subsequent marsupielization, was performed in 42 (87.5%) patients. Nephrectomy was performed in 6 (12.5%) cases. Retroperitoneoscopic laparoscopy was performed in 5 (9.4%) cases and in 2 (3.7%) patients it was possible to successfully complete the operation by removing the echinococcal cyst.
Conclusion: A kidney cyst can be easily detected using ultrasonography, but it is not possible to clarify its nature, a comprehensive examination of the patient using serological studies, MCT and MRI allows you to clarify the diagnosis. The choice of surgical procedure (traditional or minimally invasive) depends on the experience of the surgeon and the availability of appropriate equipment.

GUA-42 Laparoscopic radical prostatectomy: a single-surgeon experience of 8 years

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Background: Laparoscopic radical prostatectomy (LRP) has long become a popular mode of surgical treatment of prostate cancer and remains the only available minimally-invasive option in the countries where robot-assisted surgery cannot be afforded. There is a lack of published data on LRP in Georgia. We analyzed the short-term oncological and functional outcome after LRP based on 8 years of a single-surgeon experience.
Methods: We retrospectively analyzed the data on 689 patients who underwent LRP performed by a single surgeon between June 2010–when we pioneered LRP in Georgia–and June 2018. The following parameters were recorded: operative time, intraoperative blood loss, complications, functional outcomes, surgical margin status, and oncological follow-up.
Results: The median age at surgery was 63 years. The median prostate-specific antigen at diagnosis was 11.7 ng/mL. The analyzed surgeries included 292 transperitoneal and 397 retroperitoneoscopic procedures. The technology used included two- and three-dimensional video systems in 423 (61.39%) and 266 (38.60%) cases, respectively. Pelvic lymph node dissection was performed in 425 (61.68%) patients. Median operative time, blood loss, and length of hospital stay were 125 minutes, 184 mL, and 5 days, respectively. Mean catheterization time was 8.4 days. No conversion to open surgery was recorded and the overall intra- and postoperative complication rate was 9.23%, including Clavien IV in 19 (2.76%) and Clavien V in 2 (0.29%) patients. Neither of these two mortalities was related to the surgery or cancer-specific causes. Pathological stage pT2 was reported in 530 (76.92%), pT3a in 92 (13.35%), pT3b in 63 (9.14%), and pT4 in 4 (0.58%) cases. The overall positive margin rate was 18.72%. Overall, 77 patients (11.18%) presented persistently elevated PSA (>0.2 ng/mL) and 37 (5.37%) developed biochemical recurrence 12 months after surgery. At 12-month follow-up, 68.5% of the patients reported to be completely continent, 28.88% needed 1–2 pads daily, and 2.62% needed more than 2 pads daily. In the patients, in whom a nerve-sparing approach was attempted, self-reported rate of erection sufficient for intercourse was 51.2% 12 months after surgery.
Conclusions: The data reported herein are the largest available in Georgia to date. The results are comparable with those reported in similar studies worldwide. Limitations of our study are its retrospective nature and short duration of follow-up.

GUA-43 Optimization of modern methods for urine derivation and exenteration of pelvic organs (anterior and complete) in women during the urinary bladder and cervical cancer: our purpose and vision for the future

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Objective: The goal of the research was to identify women population suffering of urinary bladder and cervical cancer, to determine the size of exenteration and select adequate methods of urine derivation.
Indications for locally developed tumors: Timing of exenteration, category of patients, the only ultimate way to get rid of localized tumors.
Materials and methods: The study was conducted from 2007 until 2018, with 39 patients suffering from urinary bladder and cervical cancer, aged from 35 to 64 years. The average age was 53.6 years.
Urinary bladder cancer – 25 cases, T1m – 4 cases, T2 – 9 cases, T3 – 7 cases, recurrent bladder cancer – 5 cases.
In 1 case there was kidney pelvic papillary cancer with multiple metastasis in urinary bladder.
Thirteen patients had locally advanced cervical cancer, 3 of which had primary T3b cancer, and the remaining 10 patients were suffering of recurrent cancer after surgery and after chemotherapy.

When selecting urine derivation methods, we have to take into consideration
- Extent of existence
- General condition of the patient
- Grade of tumor spread

Urinary derivation forms
- 3 bilateral ureterocutaneostomy
- 30 radical cystectomy with construction of Bricker bladder
- 6 radical cystectomy with construction of orthotropic bladder substitution and modum Studer.

Results: Anterior exenteration was performed for the majority of patients (urinary bladder, uterine and cervix 2/3)
Cystectomy with construction of Bricker bladder is prevalent amongst urinary diversion methods. In 6 cases, we performed Radical cystectomies combined with the construction of an orthotropic bladder substitution with preservation of uterus, or exeterences with preservation cervix (2/3). In 5 cases continence was good and in 1 case, due to incomplete emptying, the patient required and orthotopic reservoir with self-catheterization.
- Postoperative complications
- Pyelonephritis in 5 patients,
- Orthotopic reservoir stones – 2,
- Renal insufficiency – 2 (required dialysis)
- Urethral anastomosis structure – 1,
- Paralytic transient intestinal occlusion – 1,
- Reoperation with bleeding complications – 1,
- Incomplete emptying of orthotopic reservoir which required self-catheterization- 1.

In 3 cases, ureteroacutaneostomy patients survived for 12 months. In all other cases, patients survived from 18 to 48 months.
Conclusion: When choosing a urine derivation, the following should be taken into account: the scale of the exenteration, the general condition of the patient, the tumor stage and the possible quality of life.

GUA-44 Multiple tracts tubeless percutaneous nephrolithotomy

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Background: Currently, percutaneous nephrolithotomy (PCNL) is the first line treatment for large renal stones, upper ureteral stones (>20 mm), resistant stones to extracorporeal shock wave lithotripsy, multiple staghorn kidney stones. Previously it was thought that nephrostomy tubes provide hemostasis along the tract, avoid urinary extravasation, and maintain adequate drainage of the kidney. Our objective in this study was to evaluate the safety and efficacy of multiple tubeless PCNL in the patients with multiple kidney stones.
Materials and methods: Percutaneous nephrolithotomy was performed on 25 patients with nephrolithiasis. They done underwent multiple tracts tubeless PCNL in Avicenna international hospital in Dushanbe. The mean age was 35.5 year (21–72). The mean stone size was 36.5 ± 14.3 mm. Fluoroscopy was used for accesses. General, epidural and spinal were the methods of anesthesia. KUB and renal ultrasonography were requested 2–3 days after operation.
Results: Early complete stone free rate was 88%. The mean operation time was 95 ± 14.5 minutes. Mean length of hospital stay was 3.3 ± 0.5 days. Complications according to Clavien Dindo classification: Grade 1 – fever >38C 3 cases, bleeding 1 case; Grade 2 – UTI 2 cases, Grade 3 – one case with late hematuria. Usually done two percutaneous tracts but in 3 cases we needed 3 tracts. Mortality, sepsis and pneumothorax did not occur in our study. Two cases we needed successfully re-PCNL and one patient we done TUL about residual stones.
Conclusion: Several retrospective studies in our experience shows that multiple tract tubeless PCNL is safe procedure and offers numerous advantages over routine placement of a nephrostomy tube. Also, tubeless PCNL leads to shorter hospital stays and less postoperative pain. However, for all these extended indications, the available evidence is insufficient, and needs to be substantiated by prospective randomized trials.

GUA-45 15-Year experience with extraperitoneal radical cystectomy

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Background: Radical cystectomy (RC) with transperitoneal approach and intraperitoneal formation of the different variant of urinary diversion is the standard method of treatment for patients with muscle-invasive bladder cancer. Since 2004 we adopted modified surgical technique of complete extraperitoneal “retrograde” radical cystectomy (EPRC). We retrospectively analyzed the surgical and oncological results of treatment of patients with open EPRC approach.
Materials and methods: Hospital records of the 188 patients undergoing EPRC from 2004 to 2019 were reviewed and the data were analyzed in terms of perioperative complications and outcome. Oncological results also were analyzed. Patient’s mean age at surgery was 67.8 Yr (Range: 41–89 Yr) 29.2% (55 patient) were >75 years old. Of these 188 patients, 148 were men and 40 women. For urinary diversion we used Conduit in 74 cases, orthotopic reservoir in 48 cases, sigma-rectal reservoir in 12 cases and ureterocutaneostomy in 54 cases. The proportion of orthotopic urinary diversion was – 25.3%, however the proportion of orthotopic urinary diversion was gradually increased by years. Most orthotopic urinary diversion was performed during last 5 years, which was associated with improvement of surgical skills. Substantial number of patients undergoing urterocutaeostomy (37 cases) were >75 years old.
Results: The hospital stay ranged from 7 to 44 days. The patients were followed 2–156 months. The mean operation duration (only cystectomy) was 110 min (60–170 min). Perioperative mortality was –2.1%. 30-day complications rate was 40.54%, however high grade (G3-G4) complications according to Clavien-Dindo classification system developed only in 16 cases (8.5%). Sponateneous micturition was restored in all except two patients undergoing EPRC with orthotopic urinary diversion. During Follow-up period we observed disease recurrence totally in 50 cases (26.5%) out these recurrences 8 was local (4.2%). 5-year cancer-specific survival was 72%.
Conclusions: According to our retrospective observation EPRC is feasible method of treatment of patients with muscle-invasive bladder cancer. The oncological principles are not compromised. The operation time is acceptable, and we consider that using this method we should improve functional results of orthotopic urinary diversion.