### A NEW METHOD OF LAPAROSCOPIC REPAIR OF GIANT HIATAL HERNIAS: LONG-TERM RESULTS OF 40 CONSECUTIVE PATIENTS

**Introduction:** Current techniques of laparoscopic mesh repair of giant hiatal hernias – i.e. with hiatal surface area (HSA) exceeding 20 cm<sup>2</sup> – are not effective as rate of recurrence reach 40%. Thus, usage of fundamentally new method of prosthetic repair is needed. Also, this method must exclude prosthesis-related complications.

The aim was to assess long-term results of laparoscopic tension-free repair of giant hiatal hernias with a fundamentally new prosthesis.

Material and methods: From 2010 to 2013, 44 laparoscopic repairs of giant hiatal hernias were performed. From them, 41 patients were evaluated with a mean follow-up period of 35.9±8.0 months (range, 24-49 months). Mean HSA was 37.5±15.6 cm² (range, 21.7-75.4 cm²). The posterior tension-free hiatal repair was performed with a new prosthesis – Rebound HRD-Hiatus hernia (Minnesota Medical Development, USA) which was fixed to the crura with 3-5 separated sutures. This prosthesis is heart-shaped lightweight polytetrafluorethylene (PTFE) mesh with peripheral nitinol frame.

**Results:** All procedures were successfully completed. Mean time of fixation of the prosthesis was 24.8±5.6 min (range, 15-35 min). There were no intra-operative complications associated with the repair. Mean postoperative hospital stay was 6.0±1.7 days (range, 2-11 days). Long-term follow-up showed absence of anatomical recurrences, and oesophageal complications (i.e., persisting dysphagia, strictures, and erosions). There were only 2 (4.8 %) symptomatic reflux recurrences.

**Conclusion:** This new method of laparoscopic repair of giant hiatal hernias is safe and provides absence of anatomical recurrences in long-term follow-up period. It requires thorough assessment in more delayed long-term follow-up period.

## REZULTATELE LA DISTANȚĂ ALE MANAGEMENTULUI LAPAROSCOPIC AL HIDATIDOZEI HEPATICE

#### **GRUBNIK VV, MISHCHENKO VV, CHETVERYKOV SG**

Clinica chirurgie nr.1, Universitatea Naţională de medicină, Odessa, Ucraina

Introducere: Incidența bolii hidatice hepatice este în creștere în Ucraina. Chirurgia reprezintă un "standard de aur" în tratamentul acesteia. Metodele laparoscopice sunt noi si promițătoare pentru tratamentul acestei patologii.

Scopul a fost în evaluarea rezultatelor la distanță ale managementului laparoscopic al hidatidozei hepatice.

**Material și metode:** În perioada 2003-2013, 348 pacienți cu chisturi hidatice ale ficatului au fost operați în departamentul nostru. Rezultatele a 283 bolnavi (129 – barbați și 154 – femei) au fost studiate retrospectiv. Vârsta medie a constituit 37,5 ani (18-72 ani). Patruzeci și doi pacienți au avut chisturi multiple în ambii lobi ai ficatului.

Rezultate: În total 286 pacienți au fost operați laparoscopic, 3 dintre aceștia au necesitat conversie la operație deschisă. În cadrul intervenției laparoscopice, procedee conservative (chistectomia) s-au practicat la 249 (88%) pacienți, procedee radicale (rezecții hepatice) – în 34 (12%) de cazuri. Comunicarea între chist și căile biliare s-a determinat intraoperator la 61 (21,6%) pacienți. Morbiditatea postoperatorie a fost notată la 48 (16,9%) pacienți, inclusiv infectarea cavității reziduale adânci în 21 de cazuri și bilioragie postoperatorie – în 27. Termenul mediu de supraveghere la distanță a constituit 42 luni (6 luni-7 ani). Recurența a fost detectată în 7 (2,5%) cazuri.

**Concluzii:** Analiza noastră demonstrează rezultate bune prin procedeele conservative efectuate preferabil pe cale laparoscopică, rezervând abordarea radicală doar pentru cazurile selecte.

#### LONG-TERM RESULTS OF LAPAROSCOPIC MANAGEMENT OF HEPATIC HYDATID DISEASE

**Introduction:** Incidence of hepatic hydatid disease is increasing in Ukraine. Surgery is the "gold standard" treatment. Laparoscopic methods are new and promising for the treatment of this disease.

The aim was to assess long-term results of laparoscopic management of hepatic hydatid disease.

**Material and methods:** From 2003 to 2013, 348 patients with liver hydatid disease underwent surgery in our department. Results of 283 patients were retrospectively studied. There were 129 males, and 154 females, mean age was 37.5 years (range, 18-72 years). Fourty two patients had multiple cysts of both liver lobes.

**Results:** Totally 286 patients underwent laparoscopic procedures, 3 of them required conversion to open surgery. During laparoscopic procedures, conservative surgery (cystectomy) was made in 249 (88%) patients, and radical surgery (resections of liver) was made in 34 (12%) patients. A cyst-biliary communication was revealed intra-operatively in 61 (21.6%) patients. Postoperative morbidity was seen in 48 (16.9%) patients, which included deep residual cavity infection in 21 patients, and postoperative bile leak – in 27. Mean long-term follow-up was 42 months (range, 6 months-7 years). Recurrence was detected in 7 (2.5%) cases.

**Conclusions:** Our long-term results showed good outcomes with conservative surgery as the preferred approach of laparoscopic management, reserving radical approach for selected cases only.

# TRATAMENTUL CALCULILOR DUCTULUI BILIAR COMUN ÎNTR-O SINGURĂ ȘEDINȚĂ VS ÎN DOUĂ ETAPE, ÎN CONDIȚIILE UNEI ȚĂRI CU BUGET MEDICAL REDUS: STUDIU RANDOMIZAT CONTROLAT

**GRUBNIK VV, TKACHENKO OI, ILYASHENKO VV** 

Clinica chirurgie nr.1, Universitatea Naţională de Medicină, Odessa, Ucraina