

# Suppl 1/15

**ACA Acta Chirurgica Austriaca**

**TRACTS**

**8th Annual Meeting of Chinese College of Surgeons and 19th Annual Meeting of the European Society of Surgery**

**Beijing, May 15–17, 2015**

## THE EFFECT OF HIGH INTRA-ABDOMINAL PRESSURE ON THE FUNCTIONS OF EXTERNAL RESPIRATION IN PATIENTS WITH LARGE HERNIA AND ITS CORRECTION

H.B. ISAYEV, N.Z. MUSAYEVA

M.A. TOPCHUBASHOV RESEARCH CENTRE OF SURGERY, BAKU, AZERBAIJAN

**Purposes:** We wanted to evaluate the capabilities of non-invasive pulmonary ventilation (NIPV) in the treatment of acute respiratory insufficiency combined with intensive therapy of intra-abdominal hypertension in patients with large hernia.

**Methods:** 62 patients with large ventral hernia were observed. 32 patients showed abdominal hypertension (AH) of mild degree, 21 patients developed AH of mean severity and 9 patients developed AH of severe degree.

**Results:** It is possible to establish that the basic mechanisms of respiratory insufficiency (RI) developed in early postoperative period in patients are found to be restriction and obstruction or their combination resulting in alveolar hypoventilation. Acute respiratory insufficiency showed 91.9% of patients, it arises due to intra-abdominal hypertension (82%), exacerbation of chronic obstructive pulmonary disease (5%) and a combination of above reasons (13%). The use of NIPV at PSV and PAV regimens is accompanied by reduced breathing work, increased oxygenation index, disappearance of hypercapnia in the absence of significant differences between the regimens. The NIPV in PAV regimen is determined by significant reduced time of a patient's moving away from respiration apparatus and having a restrictive component of RI twice as much as compared with the PSV regimen.

**Conclusions:** We think that the use of NIPV within the limits of "algorithm of respiratory assist in patients after surgical treatment of large and giant hernias and respiratory insufficiency developed in early postoperative period allows us to administer the intensive therapy of acute respiration insufficiency" with no endotracheal and artificial pulmonary ventilation in 92% of cases.

196, Sharifzade str, - Baku, Azerbaidjan Republik

## TAPP MODIFICATION FOR LARGE AND GIGANTIC INGUINAL HERNIA REPAIR

Valerii Kryshen

Dnipropetrovsk Medical Academy

**Aim of study:** To improve laparoscopic treatment results of large and gigantic scheduled and strangulated inguinal hernia repair.

**Materials and Methods:** 18 patient operated using author's modified TAPP method with one-sided scheduled, and 3 with one-sided strangulated hernia. According to Nyhus classification there were 3a, 3b and 4 type hernias, according to Gilbert-Rutkow-Robbins there were 3, 4, and 5 type hernias. Size of hernia sac was equal or more than 7cm, average 10, 1 ± 1, 2 cm. Soft meshes of average size 10x15 cm were used. Control group consisted of 30 patients with same pathology and operated by unmodified method ic.

**Result and discussion:** specific technics modifications for operated patients in investigated group were used. Additionally after fixation of mesh to pubic bone, fixation of mesh to the transverse fascia and superficial fascia by one or more staples were performed. The resultis achieved by using finger-assisted invagi-

nation of stretched skin into abdominal cavity so that derma to contact with mesh. Thus cavity of former hernial sac becomes obliterated. In nearest post-operational period the level of such common compilation as seroma was rated. There were 2 cases in investigated group, which is 9, 5%, and 5 cases in control group, which is 16, 7%. Patients in investigated group noted better cosmetic effect and faster skin retraction than in control group.

**Conclusion:** usage of modified laparoscopic hernioplactic in cases of scheduled and strangulated large and gigantic inguinal hernia can improve treatment results By using proposed method level of nearest complications decreased almost twice in comparison with standard TAPP. Subjective rate of patient's life quality increased.

## Surgical Treatment of Strangulated Hernia of Anterior Abdominal Wall

Ac. Gudushauri National Medical Genter, Tbilisi, Georgia. T.Gvenetadze

**Background:** Treatment of strangulated hernia stays still relevant, whereas operations are held in emergency situations and resultshow high rate of recurrences, complications, mortality. This is due to the presence of serious comorbidities in elderly and senile, for full correction of them usually is never enough time, because of late negotiability and qualification of operator.

**Goals:** To analyze reasons of recurrences and complications.

**Materials and Methods:** For the last five years (2009–2013) 592 patients with different locations of strangulated hernias of anterior abdominal wall were operated. Inguinal hernias were 367 (62%), from which primary hernias – 207 (56, 4%), once recurrent – 96 (26, 1%), multiply recurrent – 64 (17, 4%). Umbilical – 65 (11%), femoral – 42 (7, 1%), postoperative – 118 (19, 6%).

Strangulated hernias were diagnosed in different ages – from 18 to 75 and older, but more often in employable patients – 426 (72%).

24 hours and later were hospitalized 106 (17,9%), later 6–7 days 17 (16,03%) patients. Mostly occurred strangulation of the small intestine – in 254 (43%) patients, loop of the small intestine and the greater omentum – in 126 (21,2%), greater omentum – 165(27,8%), other organs (cecum, transverse colon, sigmoid colon, appendix, adnexal) – in 47(8%) patients.

Method of surgical treatment for strangulated inguinal hernias were hernioplasty by Liechtenstein – 97 (26, 43%), by Gvenetadze (complete isolation of the spermatic cord from the grid and the creation of a three-layer posterior wall of the inguinal canal) – 270(73, 57%). While strangulated femoral hernias – in 42 patients – was used "Plug" technics by femoral approach. During strangulated umbilical hernias (with saving umbilicus) Onlay technics in – 53(81, 5%), Inlay – in 12(18, 5%) patients.

Patients with postoperative strangulated hernias in mesogastric and epigastric areas, in view of localization and size, were operated by Sublay technics in – 65(55%), hypogastric areas by Onlay technics in 27(23%), Sendvih in – 9(7, 6%) and operation of Ramirez in – 17 (14, 4%) patients.

In 27 patients with necrosis of intestines was completed resection of intestine by formation various types of entero – entero anastomosis.

**Results:** In early postoperative period following complications were observed: suppuration of wounds – 35 (5, 91%), hematoma of wounds – 65 (10, 98%), wound seroma – 86 (14, 53%), wound infiltration – 17 (2, 87%). All complications were cured by conservative method – dressings, punctures, physiotherapies. From 592 strangulated hernia operated patients – 16 (2, 8%) died