

Materials and methods: Modern endoscopic diagnostics includes examination not only in white light, but also light and electronic filters that are used to improve the image and examine the vascular pattern (NBI, ISCAN). If necessary, the study can be supplemented with chromoscopy (Lugol's solution, 1% - acetic acid), which will allow to detailed assessment of the mucosal surface and identify pathological lesions. During the esophagoscopy, it is possible to take material for cytological or histological examination, which is necessary for making a diagnosis. Treatment options for Barrett's esophagus include: argon plasma ablation, resection of foci or radiofrequency ablation. Endoscopic antireflux mucosectomy of the cardiac mucosa is possible at cardiac insufficiency. Benign mucosal neoplasms are possible to remove using loop resection, cap resection of the formation or dissection in the submucosal layer. The first stage with malignant neoplasms is performed EUS to assess the degree of invasion, as well as the presence of regional lymphadenopathy. T1aN0M0 cancer is dissected in the submucosal layer, intraluminal photodynamic therapy is also possible. Neoplasms in the submucosal layer are used submucosal tunneling resection techniques. Achalasia cardia are treated with using dilatation or oral myotomy. Zenker's diverticulum are treated with using diverticuloesophagostomy, and also there is tunneling resection techniques that can be possible.

Results: In Oncology Dispensary of Leningrad Regional since 2016 RFA was performed for 27 patients with Barrett's esophagus with dysplasia of various degrees. Endoscopic antireflux mucosectomy of the cardiac mucosa was performed in 4 patients.

Conclusions: Endoscopic resection of the esophageal mucosa lesions are performed in 45-50 patients annually. Endoscopic submucosal dissection of esophageal cancer are performed 10-15 patients annually. Submucosal tunneling resection techniques performed 4-5 patients per year.

CAPSULE ENDOSCOPY FOR SCREENING COLON TUMORS

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Introduction: Most of the colon tumors are detected in the later stages. The introduction of new, minimally invasive technologies into clinical practice allows to improve the results of the diagnosis of neoplasms.

Material and methods: Capsule endoscopy is a procedure for colon examination using a miniature camera, which takes more than 10,000 images of colon at a speed of 4 to 24 frames per second. For the patient, the procedure itself does not cause discomfort. On the day of the study, the patient may do his usual activities. The indications for capsular examination of the colon may be suspected tumor of the colon, a positive test of fecal occult blood test, and the patient is over 50 years old. We made a decision to launch a pilot project for screening the colon among health care workers in Oncology Dispensary of Leningrad Region.

Results: In the years 2017-2018, we performed 67 capsule colon examinations for medical workers who had not previously performed a colonoscopy. A total colon investigation was performed in 58 patients (87%). Among these patients 2 malignant tumors of the colon (3.5%) were detected. Colon epithelial neoplasia was detected in 11 patients (19%). These findings contributed to perform colonoscopy with endoscopic polypectomy.

Conclusion: Capsule endoscopy of the colon can be used for examination, in cases where colonoscopy is not possible. Capsule endoscopy helps to convince the patient of the need to perform colonoscopy. Capsule endoscopy is a safe method for screening colorectal cancer.

Keywords: capsule endoscopy; colorectal cancer

ENDARTERECTOMIA CAROTIDIANĂ PRIN EVERSIIUNE CU PREZERVAREA SINUSULUI: REZULTATELE PRECOCE ȘI TARDIVE

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Introducere: Endarterectomia carotidiană (EAEC) și-a demonstrat avantajul în tratamentul stenozei hemodinamice semnificative ale arterei carotide interne (ACI). Tehnica prin eversiune este cea mai populară, însă în versiunea sa standard se asociază cu traumatizarea frecventă a sinusului carotidian, cu impact negativ asupra reglării vegetative a tonusului vascular și hemodinamic.

Scopul: Evaluarea eficacității EAEC prin eversiune cu prezervarea nervilor sinusului carotid, comparând rezultatele precoce și la distanță cu cele ale unui lot de control.

Material și metode: Studiul a inclus 375 pacienți supuși tratamentului chirurgical în Spitalul Clinic Regional Celiabinsk în perioada anilor 2012-2018. În lotul I (208 bolnavi) EAEC prin eversiune s-a efectuat conform tehnicii standard. În lotul II (167 pacienți) s-a practicat EAEC modificată, cu prezervarea sinusului. Loturile au fost comparabile în funcție de vârstă, gen, statutul neurologic și hipertensiv inițial, utilizarea șuntului temporar, timpul de clampaj al ACI și gradul leziunii arteriale carotidiene contralaterale. Pe lângă înregistrarea parametrilor hemodinamici comuni, a fost evaluată și activitatea vegetativă în baza analizei prospective a variabilității frecvenței cardiace utilizând ritmocardiografia. La etapa de *follow-up*, parametrii hemodinamici au fost evaluați la 103 pacienți: cu păstrarea nervilor sinusului carotidian (39) și după secționarea acestora (64).

Rezultate: În prima zi atât presiunea sistolică, diastolică, cât și presiunea pulsului, precum și frecvența cardiacă au fost mai reduse la bolnavii după EAEC cu prezervarea sinusului în comparație cu lotul de control. În plus, diminuarea influenței simplice asupra ritmului conform ritmocardiografiei a fost notabilă. La pacienții operați cu prezervarea nervilor sinusului carotidian elevarea tensiunii arteriale

s-a atestat mai rar, iar doza necesară de remedii antihipertensive a fost mai mică.

Concluzii: S-au constatat diferențe semnificative dintre parametrii, evaluați precoce și la distanță, ai hemodinamicii arteriale postoperatorii și reglării vegetative a tonusului vascular, în funcție de prezervarea nervilor sinusului carotidian. Practicarea EAEC prin eversiune cu prezervarea sinusului carotid reduce riscul complicațiilor postoperatorii cauzate de dereglările vegetative.

Cuvinte cheie: endarterectomie carotidiană, sinus carotid, dereglări vegetative

SINUS-PRESERVING MODIFICATION OF EVERSIONAL CAROTID ENDARTERECTOMY: EARLY AND LATE RESULTS

Introduction: Carotid endarterectomy (CEAE) has proven its advantage in correcting hemodynamically significant stenoses of the internal carotid arteries (ICA). The eversion technique is the most popular, but with its standard procedure, traumatization of carotid sinus nerves occurs, which has a negative effect on the vegetative regulation of vascular tonus and hemodynamics.

Aim: To evaluate the effectiveness of eversional CEAE with preservation of carotid sinus nerves, by comparing of early and long-term results with a control group of patients.

Materials and methods: The study included 375 patients treated surgically at the Chelyabinsk Regional Clinical Hospital from 2012 to 2018. In the first group (208 patients), eversional CEAE was performed according to standard technique. In the second group (167 patients), a sinus-preserving modification of CEAE was applied. The groups were comparable by age, sex, baseline neurological status, baseline hypertension, use of a temporary shunt, ICA cross-clamping time, and degree of contralateral lesion of the carotid arteries. In addition to common hemodynamic parameters, mediator vegetative activity evaluated based on a prospective analysis of heart rate variability using rhythmocardiography. In the follow-up period, hemodynamic parameters assessed in 103 patients: with preservation of the carotid sinus nerves (39) and after their transection (64).

Results: On the 1st day, systolic, diastolic and pulse blood pressure, as well as a heart rate were lower in patients after sinus-preserving CEAE as compared with the control group. In addition, a decrease in sympathetic pressure effect on the rhythm according to rhythmocardiography was noticeable. In patients operated with the preservation of carotid sinus nerves, an increased blood pressure is less common and they require a lower dosage of antihypertensive drugs.

Conclusions: There are significant differences between early and distant parameters of postoperative arterial hemodynamics and vegetative regulation of vascular tonus, depending on preservation of the carotid sinus nerves. Practical application of sinus-preserving eversional CEAE reduces the risk of postoperative complications due to vegetative dysregulation.

Key words: carotid endarterectomy, carotid sinus, vegetative disorders

EXPERIENȚA CLINICII DE CHIRURGIE PEDIATRICĂ ÎN TRATAMENTUL HEMANGIOAMELOR ȘI MALFORMAȚIILOR VASCULARE

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Introducere: Afecțiunile congenitale vasculare includ tumorile vasculare (hemangioamele infantile, hemangioendoteliomul caposiform, hemangioame non-involutive, hemangioame rapid-involutive) și malformații vasculare (capilare, venoase, limfatice, arteriovenoase și mixte). Hemangioamele sunt cele mai frecvente tumori benigne vasculare în populația pediatrică iar localizarea lor poate fi unică – extremitate cefalică (60%), trunchi (25%) sau multiplă, impunând extinderea investigațiilor pentru interesarea viscerală (hemangioame hepatice, intestinale, splenice, intracraniene, renale). Malformațiile capilare apar ca leziuni singulare sau în asociere în cadrul altor afecțiuni – sindrom Struge-Weber, sindrom Klippel-Trenaunay. Cunoscute în trecut ca limfangioame, malformațiile limfatice sunt clasificate acum ca fiind microcistice, macrocistice (localizate mai frecvent la nivelul capului și gâtului) sau mixte.

Material și metode: Lucrarea prezintă cazuri de hemangioame din colecția clinicii, aspectul lor clinic și evoluția sub terapie cu un beta-blocant. Experiența Clinicii de Chirurgie Pediatrică Iași privind utilizarea Propranololului datează din 2011 și se datorează participării într-un studiu internațional multicentric dublu-orb randomizat privind eficiența și siguranța utilizării mai multor scheme de betablocant în tratamentul hemangioamelor infantile. Acest studiu a condus la aprobarea produsului Hemangioli de către Agenția Europeană a Medicamentelor (EMA).

Rezultate și concluzii: Hemangioamele au un prognostic bun, cu 98% rata de răspuns la administrarea de Propranolol.

Cuvinte cheie: malformație vasculară, hemangiom, higrom chistic, propranolol

THE EXPERIENCE OF PEDIATRIC SURGERY CLINIC IN THE TREATMENT OF HEMANGIOMAS AND VASCULAR MALFORMATIONS

Introduction: The vascular congenital disorders include vascular tumor (hemangioma, kaposiform hemangioendothelioma, tufted hemangioma, non-involuting congenital hemangioma, rapidly-involuting congenital hemangioma) and vascular malformation (capillary, venous, lymphatic, arteriovenous and mixed malformations). Hemangiomas are the most common benign vascular tumors in the pediatric age and their localization may be unique – head (60%) and trunk (25%) or multiple, requiring extensive investigations for visceral involvement (hepatic, intestinal, splenic, intracranial, renal). Capillary malformations occur as isolated lesions or in association with other disorders – Struge-Weber syndrome, Klippel-Trenaunay syndrome. Lymphatic malformations, previously known as lymphangiomas are classified as microcystic, macrocystic (often present on the head and neck) or mixed.

Material and methods: The paper presents cases of hemangiomas on the clinic's collection, their clinical aspects and evolution under the pharmacotherapy with a beta-blocker. The experience of the Pediatric Surgery Clinic in Iasi regarding the use of Propranolol dates back to 2011 and is due to participation in a randomized, double-blind, multi-center international study on the safety and efficiency of betablockers in the treatment of infantile hemangiomas. The study led to the approval of Hemangioli by EMA (European Medicines Agency).