riguroase. Chirurgia tradiţională deschisă rămâne a fi preferabilă, iar cea minim-invazivă – ca opţiune pentru personalul experimentat în secţiile specializate.

ESOPHAGEAL DIVERTICULUM: MINIMALLY INVASIVE SURGICAL TREATMENT

Introduction: Esophageal diverticulum (ED) is a relatively rare pathology of the gastrointestinal tract. Traditionally addressed through open surgical techniques, disease leaves also room for maneuver to minimally invasive surgery (MIS).By means of this study we aim to present the experience of minimally invasive surgical treatment of esophageal diverticulum. Subsidiary, we present the literature review on minimally invasive surgical techniques.
Material and methods: We analyze the cases of patients with ED undergoing MIS treatment, focusing on preoperative symptoms, and postoperative and remote results.
Results: Three patients (two men and a woman, aged 58, 59 and 65 years, respectively) have undergone minimally invasive surgery regarding intrathoracic ED. Dysphagia and air and food eructations were the dominant preoperative complaints. Operating time was 195, 125 and 120 minutes, respectively. There were no intraoperative complications, as well as no long-term recurrence of the diverticulum or of the preoperative complaints.
Conclusions: Surgery of esophagus diverticular pathology supports elevated morbidity and mortality indicators. MIS interventions are liable but not changeable. Patients need to be carefully evaluated and undergo a rigorous selection. Traditional open surgery remains the preferred one, while minimally invasive surgery is an option for experienced staff in specialized departments.

STRATEGIA DE ECONOMISIRE A SÂNGELUI: MODIFICAREA CIRCUITULUI CARDIOPLEGIC LA COPIII OPERAŢI PENTRU MALFORMAŢII CARDIACE CONGENITALE

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Scopul cercetării este optimizarea managementului de sânge în cardioplegie la copiii cu greutate mică, care ar putea reduce utilizarea sângelui.
Material şi metode: Pentru a reduce circuitul cardioplegic a fost propusă o schemă redusă (RC), care include două şunturi 1/8 x 1/32, volumul întreg este de 14 ml. Primul este conectat la pompa seringii cu KCI, 2 Meq/ml, iar al doilea – la canula cardioplegică. Fluxul sanguin este furnizat din oxigenator. Efectul cardioplegic în grupul RC (15 pacienţi) a fost comparat cu cel al cardioplegiei administrate prin circuit standard (SC) – 16 pacienţi, care include pompa rolă, tubul 3/16, umplere volum – 80 ml. Vârsta pacienţilor a fost de 7-14 luni, greutatea corporală mai mică de 10 kg. Datele de anchetă au arătat diferenţe semnificative între grupuri. Au fost comparate timpurile de setare a stopului cardiac, „priming” volumul, cantitatea administrată de concentrat eritrocitar, hematocritul după cardioplegie.
Rezultate: Volumul de amorsare utilizat în grupul SC a fost mai mare decât în grupul RC (350 vs 250 ml). Administrarea sângelui in cardioplegie prin RC a asigurat instalarea de stop cardiac în 29±13 sec, timp semnificativ mai mic decât în grupul SC, 45±11 sec. Nu a fost nici o diferenţă semnificativă dintre hematocriturile după cardioplegie, dar în grupul SC s-a administrat o cantitate mai mare de concentrate din sânge (130,5±16,3 ml vs 95,8±20,6 ml). Concentrația de K^+ mai mare (>4,5 mEq/l) a fost, evident, mai frecventă în grupul SC – 31,3% faţă de 13,3%. Gestionarea cardioplegiei prin RC s-a dovedit a fi mult mai simplă.
Concluzii: Reducerea schemei pentru administrare a sângelui în cardioplegie la copiii cu greutate corporală mică permite reducerea volumului de amorsare, reduce utilizarea de sânge autolog, mai puţin contact cu suprafaţa artificială şi oferă stop cardiac mai rapid. În acelaşi timp, se reduc costurile consumabilelor.

BLOOD SAVING STRATEGY: MODIFICATION OF CARDIOPLEGIA CIRCUIT IN CHILDREN OPERATED FOR CONGENITAL HEART MALFORMATIONS

The aim of study was the optimization of management of blood cardioplegia in children with low body weight, by method which could reduce blood use.
Material and methods: To minimize the cardioplegic circuit was proposed reduced scheme (RC), which includes 2 shunts 1/8 x 1/32, with whole filling volume of 14 ml. The first is connected to the syringe pump with KCl, 2 Meq/ml, and the second – to the cardioplegic cannula. Blood flow was supplied from oxygenator. Cardioplegic effect in RC group (15 patients) was compared with that of cadioplegia administered by standard circuit (SC) – 16 patients, which includes the roll pump, tube 3/16, filling volume 80 ml. Patients were aged 7-14 months, body weight less than 10 kg. Investigation’s data showed no significant differences between groups. Were compared cardiac stop setting time, priming volume, administrated amount of red cells concentrate, hematocrit after cardioplegia.
Results: The volume of priming used in SC group was higher than in the RC group (350 vs 250 ml). Administration of blood cardioplegia through RC assured installation of cardiac arrest in 29±13 sec, significantly shorter time than in the SC group, 45±11 sec. There was no significant difference of hematocrit value after cardioplegia, but SC group received more red blood cells concetrate (130.5±16.3 ml vs 95.8±20.6 ml). Occurrence of high potassemia (>4.5 mEq/l) was obviously more frequent in SC group – 31.3% vs 13.3%. The management of cardioplegia through RC proved to be much simpler.
Conclusions: The RC for blood cardioplegia administration in children with low body weight allows reducing of priming volume, less autologous blood usage, less contact with the artificial surface and provides express cardiac arrest. At the same time, it reduces the costs of supplies.