Volume 3, Issue 1, January 2025 ISSN (E): 2938-3765

ESOPHAGOANASTOMOSIS COMPLICATIONS IN CHILDREN WITH ATRESIA OF THE PILLOUS

Ajimamatov Khalilulla Tashtemirovich
PhD, Associate Professor, of the Department of Pediatric Surgery,
Andijan State Medical Institute, Andijan, Uzbekistan

Abstract
According to a large number of authors from the CIS countries and foreign countries on the treatment of esophageal atresia in young children, despite a number of achievements, many problems in this regard, as well as problems associated with technical aspects, have not been resolved, and mortality in this pathology is 40- 60%.
This guideline describes balloon tamponade of the cardia of the stomach and an improved method of applying esophagoanastomosis with a 180° rotation of the esophagus around its axis and suturing the anterior wall of the esophagus in young children diagnosed with esophageal atresia. The proposed tactical and technical approaches have made it possible to reduce the frequency of early postoperative complications and mortality associated with the operation, improve the quality of life of young children. The manual is intended for pediatric surgeons of neonatal surgery departments of specialized regional children's medical institutions.

Keywords: Esophageal atresia, esophagoanastomosis, young children, surgical treatment.

Introduction

The relevance of the problem. According to numerous authors from the CIS countries and foreign countries dedicated to the treatment of esophageal atresia in newborns, despite a number of achievements in this area, many problems, as well as problems related to technical aspects, remain unresolved [1.5.6], and the mortality rate from this pathology is 40-60% [5.16,19]. Especially in newborns with concomitant somatic diseases, difficulties arise in eliminating this defect [4,7,13,18,21].

The inclusion of data on the side effects of thoracotomy on the musculoskeletal complex of the growing organism in many literary sources has led to the introduction of minimally invasive methods such as thoracoscopy [3,5,9,7,16,18,19,20]. However, along with the advantages of this method, there are also obstacles to thoracoscopy due to ipsilateral lung collapse in children with less than 2 kg body mass and severe lung pathology. In addition, transpleural access is one of the drawbacks of thoracoscopic correction [3,5,8,10,12,16,18,20].

Diagnostic and tactical errors are often made in cases of congenital malformations without external defects, manifested as acne atresia. 58% of newborns with such anomalies are admitted to the surgical hospital within 3 days, while 42% of patients requiring emergency care are admitted to the surgical departments after 4-6 days, which creates conditions for the occurrence of negative consequences.

Web of Medicine: Journal of Medicine, Practice and Nursing
webofjournals.com/index.php/5

Therefore, to date, there is no consensus on the diagnosis of communicative forms of esophageal atresia and their surgical correction.

Conclusion

The results of surgical treatment of 62 newborns admitted to the surgical department of the Andijan Regional Children's Multidisciplinary Medical Center (AIMMC) over 5 years out of 68 newborns with AK who were hospitalized exclusively with AK and who had a primary (straight) anastomosis were analyzed.

Early postoperative complications in newborns of the study group

№	Type of complication	Control group (n=62)	
		abs	%
1	Anastomosis instability	6	9,6
2	Fistula stump instability	1	1,6
3	Tracheo-esophageal fistula recanalization	1	1,6
4	Stomach perforation, peritonitis	2	3,2
	Total	10	16

Of the 6 newborns diagnosed with anastomosis instability, 2 underwent a surgical tactic of retoracotomy. Anastomosis was performed in 1 newborn and a cervical esophagostomy was performed and a Cader gastrostomy was formed, while another patient underwent reanastomosis. Conservative treatment was performed on 4 newborns, resulting in anastomosis closure in 3 patients on the 26th-49th day after surgery. One newborn with anastomotic instability, despite operative and conservative treatment, experienced a fatal outcome.

Conclusion

In the early postoperative period, complications such as end-to-end esophageal anastomosis and anastomotic instability were more common in children born with esophageal atresia, however, it was noted that this complication decreased by 16% due to the research methods used by doctors in our clinic.

References

1. Ажибеков Н.Н. Пред- и послеоперационное ведение новорожденных с атрезией пищевода //Вестник АГИУВ.-2015.-№3-4.-С.59-61
2. Афуков И. И., Степаненко С. М., Разумовский А. Ю. Особенности предоперационной подготовки и послеоперационного периода у детей с пластикой пищевода //Детская хирургия, №1, 2012 34-38
3. Козлов Ю.А., Новожилов В.А., Распутин А.А. Атрезия пищевода и генетические заболевания – взгляд детского хирурга //Росс.вест.дет.хир. и анест.реаниматологии. 2017;Том VII; №1; 71-80
4. Машков А.Е., Щербина В.И., Тарасова О.В., Филюшкин Ю.Н. Хирургическая тактика при различных формах атрезии пищевода у детей //Детская хирургия, № 4, 2013 29-31

Web of Medicine: Journal of Medicine, Practice and Nursing
webofjournals.com/index.php/5

5. Разумовский А.Ю., Мокрушина О.Г., Ханвердиев Р.А., Эволюция метода торакоскопической коррекции атрезии пищевода у новорожденных //Росс.вест.дет.хир. анест.реаниматологии. 2012 Том II, № 1 92-98
6. Разумовский А.Ю., Ханвердиев Р.А. Непосредственные результаты торакоскопической атрезии пищевода у новорожденных //Детская хирургия. 2011; 4: 4—9.
7. Ханвердиев Р. А., Разумовский А. Ю. Сравнительный обзор методов пластики пищевода у детей с атрезией пищевода //Детская хирургия, №2, 2012 47-50
8. Чепурной Г.И. Розин Б.Г. Трудности диагностики атрезии пищевода с нижним трахеопищеводным свищом //Детская хирургия. 2016; 20(4)-218-222
9. Эргашев Б.Б., Эшкабилов Ш.Д. Оптимизация хирургической коррекции атрезии пищевода у новорожденных //Росс.вест.дет.хир. и анест. реаниматологии. 2016 том VI №2 69-72
10. Alsebayel M.M. et al.: Congenital esophageal atresia and microtia in a newborn. Am J Case Rep, 2018; 19: 523-526
11. Bradshaw CJ, Thakkar H, Knutzen L, et al. Accuracy of prenatal detection of tracheoesophageal fistula and oesophageal atresia. J Pediatr Surg 2016;51(8):1268–72.
12. Ethun CG, Fallon SC, Cassady CI, et al. Fetal MRI improves diagnostic accuracy in patients referred to a fetal center for suspected esophageal atresia. J Pediatr Surg 2014;49(5):712–5.
13. Friedmacher F, Kroneis B, Huber-Zeyringer A et al. Postoperative complications and functional outcome after esophageal atresia repair: results from longitudinal single-center follow-up . J Gastrointest Surg. 2017: 21: 927 – 935.
14. Garabedian C, Sfeir R, Langlois C, et al. Does prenatal diagnosis modify neonatal management and early outcome of children with esophageal atresia type III? J Gynecol Obstet Biol Reprod (Paris) 2015;44(9):848–54.
15. Hunt RW, Perkins EJ, King S. Peri-operative management of neonates with oesophageal atresia and tracheo-esophageal fistula. Peds Respir Rev. 2016;19: 3 – 9
16. Lal DR, Gadepalli SK, Downard CD et al. Perioperative management and outcomes of esophageal atresia and tracheoesophageal atresia. J Pediatr Surg. 2017; 52(8): 1245 – 1251.
17. Menzies, J.; Hughes, J.; Leach, S.; Belessis, Y.; Krishnan, U. Prevalence of malnutrition and feeding difficulties in children with esophageal atresia. J. Pediatr. Gastroenterol. Nutr. 2017, 64, e100–e105.
18. Okuyama H, Koga H, Ishimaru T, et al. Current practice and outcomes of thoracoscopic esophageal atresia and tracheoesophageal fistula repair:a multi-institutional analysis in Japan. J Laparoendosc Adv Surg Tech A 2015;25:441–4
19. Patria M.F., Ghislanzoni S., Macchini F. Respiratory Morbidity in Children with Repaired Congenital Esophageal Atresia with or without Tracheoesophageal Fistula. J. Environ. Res. Public Health 2017, 14, 1136
20. Sulkowski JP, Cooper JN, Lopez JJ, et al. Morbidity and mortality in patients with esophageal atresia. Surgery 2014;156(02):483–491
21. Zani A, Jamal L, Cobellis G, et al. Long-term outcomes following H-type tracheoesophageal fistula repair in infants. Pediatr Surg Int 2017;33(02):187–190.

Web of Medicine: Journal of Medicine, Practice and Nursing
webofjournals.com/index.php/5