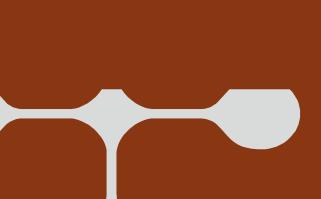




According to NANDA Diagnosis and NIC, Administration Nursing Care of Patient With Congenital Esophageal Atresia



Aylin Akca Sumengen* Koc Universty, Istanbul, Turkey

Abstract

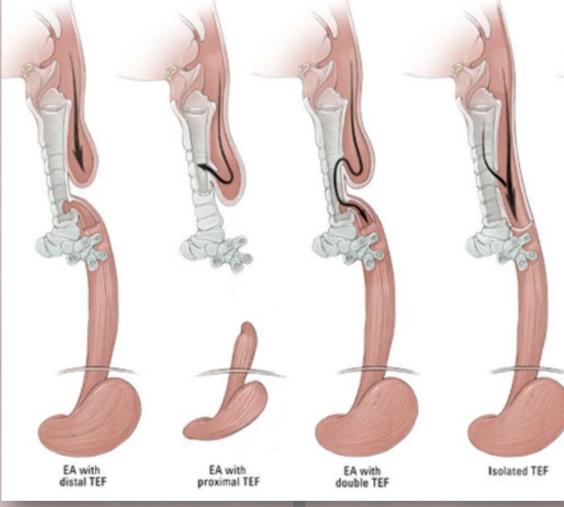
Esophageal atresia is the most common malformations of the esophagus anomalies which is life-threatening and requires lifelong treatment and care. Laryngeal cleft is a rare congenital anomaly too. It causes the connection between the trachea and esophagus. And the last one that, tracheomalacia is defined as loosening or softening of the tracheal and bronchial lumen leading to the lungs and collapsing/contracting during airflow.

In addition, laryngeal clefts and tracheobronchomalacia are similarly dangerous diseases that affect the respiratory tract in a major way and can often be fatal, requiring intensive care. Infants with these diseases experience developmental delays, recurrent respiratory infections, frequent intensive care hospitalizations.

In this study, it is presented a 5-month-27-day-old infant 'case M' with a diagnosis of esophageal atresia, laryngeal cleft, and tracheobronchomalacia. The anamnesis of Case M was taken and evaluated according to Marjory Gordon's Functional Health Patterns Model. As a nursing diagnosis were made in accordance with NANDA, and intervened according to the NIC, and the results were established according to the NOC.

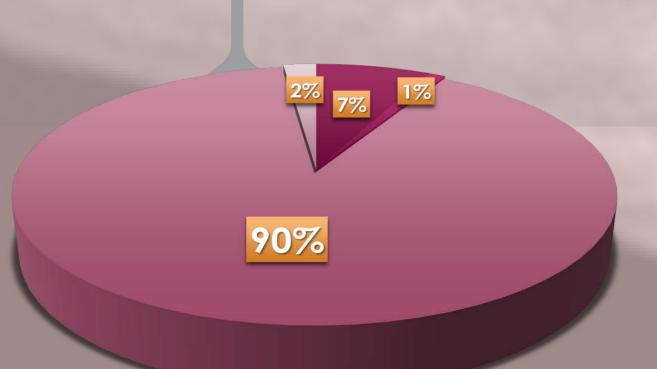
Introduction Atresia is 2.99 er 10,000 birt Every 2000 2100 births is Tracheomalacia The incidence of Laryngeal cleft

Esophageal Atresia



Esophageal atresia is one of the most common malformations of the esophagus anomalies which is lifethreatening and requires lifelong treatment and care. Particularly, there is a need for follow-up, treatment and care for life. (1, 2) Treatment and caring needs depend on the type of atresia. (3)

The First Classification of Esophageal Atresia was Performed By Gross in 1953.



■ Type B: OA with proximal end fistulised into the trachea with a

Type C: OA with proximal end with blunt termination

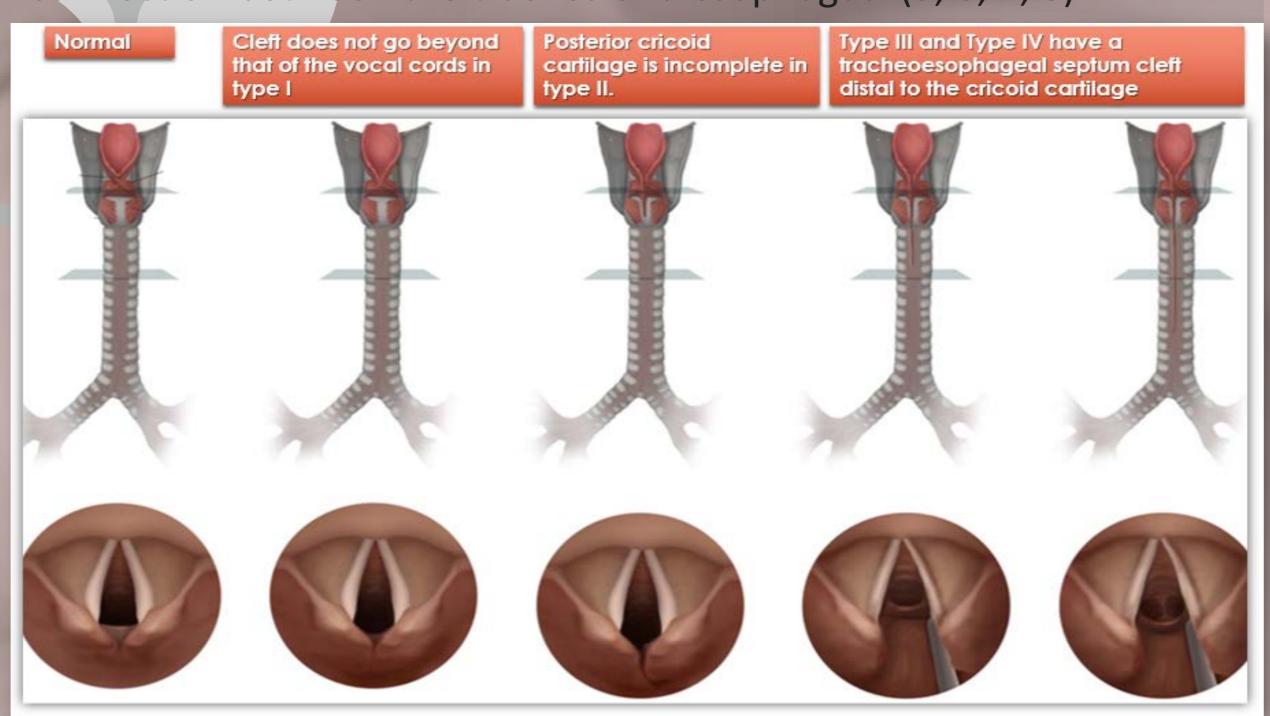
Type D: A where both ends fistulised into the trachea

Tracheobronchomalacia

Tracheomalacia is defined as loosening or softening of the tracheal and bronchial lumen leading to the lungs and collapsing/contracting during airflow. (4)

Laryngeal Cleft

Laryngeal cleft is a rare congenital anomaly that causes the connection between the trachea and esophagus. (5, 6, 7, 8)



The patient who was admitted to the hospital with aspiration pneumonia on 7th January 2016 started being followed as 5 months 27 days old and was admitted to the intensive care unit for 45 days There are no anomalies in the parents.

Marjory Gordon's Functional Health Patterns Model

Detection and Management of health

When interviewed about baby's health, she stated that 'she believes that the baby will improve and this hospital and health workers are safe and she has high hopes'.

Nutrition and Metabolic Status

Patient was fed with TPN until his transpyloric catheter was inserted. After the catheter was inserted, it was started to be infused with food by constant infusion at a rate of 3ml per hour. Then it is continued to be increased.

Discharge/Elimination No urine or stool problems

Activity/Exercise

When the baby's sedation was, there were active limb movements.

Cognitive Perception

When the baby's sedative medicines were cut off, it was seen that he could look at his name, trace with his eyes, grasp small objects, recognize her mother's voice.

Sleep/Rest

When the baby's sedation was interrupted, he had an average of 15 hours of sleep per day.

Self-Perception and Self

Baby's mother was evaluated. She stated that she saw herself as a good mother devoted to the health of her baby and she was open for further education for the care and healing of the baby.

Role and Relationships

The mother stays in hospital because of her baby's disease.

Sexuality and Reproduction

Mother S has stated that she has been in hospitals for months for

Coping and stress

SpO2: 92%-97%

The baby's mother says she can cope with it and seems positive. **Faith and Values**

The mother was thinking positively during the interview and said that it made her feel good. (9)

Physical Examination Findings

Weight: 2.810, Weight Percentile: <3	Blood pressure: 123/87 (right leg)		
Height: 52cm, Height Percentile: <3	Pulse: 147 / apical, rhythmic strong		
Head circumference: 39 cm,	Capillary filling time: lower and uppe extremity 2sec		
Respiration: 32			
Mechanical Ventilation: In PCV mode,	Body Temperature: 36.7 Axillary		
PEEP 3, Rate: 20, I: E Ratio ¼, PIP: 24	There Is No Known allergy: -		
FiO2 between 45-60% was ventilated	Vaccinations: Proper for the age		

NANDA Diagnosis of Nursing: Infection Risk Area: Safety/Protection Class: Infection

Related Factors		Intubation, tracheostomy, use of ventilator, surgical treatment, intermittent enteral and parenteral feeding, following arterial pressure after surgery, due to insertion of urine probe after surgical procedures				
NOC	Area	Grade	NIC	Area	Grade	
0703 The severity of	Physiologic	Immune	6540 Infection			

	NOC	Aica	Graue	IVIC	Alea	Grade
	0703 The severity of infection	Physiologic Health	Immune response		Safety	Risk
	1102 Wound Healing: Primary	Physiologic Health	Tissue Integrity	6550 Prevention from Infections		Management

Infection Control-Exapmle For The NIC

If necessary/appropriate, start and continue the specified isolation measures. Properly, limit the number of visitors.

Keep the aseptic environment while changing the TPN tube and bottles. According to the CDC guidelines; Make sure that perieral / central / IV catheters are in aseptic conditions for dressing change.

Teach the patient's family/caregiver about signs and symptoms of infection and inform healthcare providers.

NANDA Nursing Diagnosis: Liquid Volume Depletion **Area:** Nutrition Class: Hydration Surgical procedures, associated with antidiuretic Dalatad Fast

Related Factors	therapy
Descriptive Factors	
	Pale cold and humid skin of baby after operations

NOC	Area	Grade	NIC	Area	Grade
0601	Dhysiologis	Liquid Q	2180		
Liquid	Physiologic Health	Electrolyte	Hipovolemia	Physiological	Ticcuo
Balance			Management		Tissue Perfusion
0602	Physiologic	Liquid Q.	2080	Complex	Management
	Physiologic on Health	Electrolyte	Liquid/Electroly		ivialiagellielit
пушацин			te Management		

NANDA Diagnosis of Nursing: Imbalance in Feeding: Less tha

Alea. Nutilition	Class. Lating
	Due to medical diagnosis, the nutrition is difficult due to
Related Factors	the weight, height and head percentile being less than 3
	Weight · 2 210 (Normal· 5 9/-9 3/)

Descriptive Factors	Height: 52cm (Normal: 61.6-71.3)
	Head Circumference: 39cm (Normal: 40.4-45.3)

			•		<u> </u>
NOC	Area	Grade	NIC	Area	Grade
0102 Child	Eunstion	Growth &	1160		
Development:		Development	Monitoring		
6 months	аі пеаіці	Development	Nutrition	Physiological:	Nutrition
			1200 Total	,	Support
			Parenteral	Dasic	Support
			Nutrition		
			Application		

NANDA Nursing Diagnosis: Risk Of Difficulty As Their Caregivers (Mom)

	-	
Area: Role Relationship	Class: Carer's Role	
	Depending on whether	er the medical diagnosis of
Related Factors	the baby requires hor	ne treatment

Depends on the need	for	long maintenance	nursing

NOC	Area	Grade	NIC	Area
2506 Caregivers Emotional Health	Health Information & Behavior	Health Status of Family Members		
2205 Care Provider Performance: Direct Care	Health Information & Behavior	Performance of Care Provider in Family	7040	Family
1302 Coping	Functional Health	Psychological Adaptation	Support for Caregiver	Family
2508 Career Goodness	Health Information & Behavior	Health Status of Family Members		
1813 Information: Treatment Regime	Health Information & Behavior	Health information		

Conclusion

In conclusion, esophageal atresia, laryngeal cleft, and tracheobronchomalacia are rare diseases, it has been observed that there is no study of nursing care of these diseases in our country. So literature need new work to be done this area.

References

- 1. Krishnan U, Mousa H, Dall'Oglio L, et al. ESPGHAN-NASPGHAN guidelines for the evaluation and treatment of gastrointestinal and nutritional complications in children with esophageal atresiatracheoesophageal fistula. J Pediatr Gastroenterol Nutr 2016;63(5):550-70.
- Pinheiro PF1, Simões e Silva AC, Pereira RM. Current knowledge on esophageal atresia. World J
- Gastroenterol 2012;18(28):3662-72. http://dx.doi.org/10.3748/wjg.v18.i28.3662 Lee. S, (2018) Basic Knowledge of Tracheoesophageal Fistula and Esophageal Atresia Advances in
- Neonatal Care Vol. 18, No. 1 pp. 14-21 4. Nelson M, Green G, Ohye RG. Pediatric tracheal anomalies. Cummings otolaryngology. 6th ed. London: Elsevier; 2015.
- 5. G. Pettersson, Inhibited separation of larynx and the upper part of trachea from oesophagus in a newborn; report of case successfully operated upon, Acta Chir. Scand. 110 (3) (1955) 250e254.
- Fracchia. M.S, (et. al) Assessment of the feeding Swallowing Impact Survey as a quality of life measure in children with laryngeal cleft before and after repair, International Journal of Pediatric Otorhinolaryngology 99 (2017) 73-77
- Johnston. D, Watters. K, Ferrari. R, Rahbar. R, Laryngeal cleft: Evaluation and management International Journal of Pediatric Otorhinolaryngology 78 (2014) 905–911
- 8. B. Benjamin, A. Inglis, Minor congenital laryngeal clefts: diagnosis and classification, Ann. Otol. Rhinol. Laryngol. 98 (6) (1989) 417-420.
- 9. Gordon, M. (1987). Nursing diagnosis: process and application: New York: McGraw-Hill, 1987. 2nd ed.

* Aylin Akca Sumengen was born on January 13, 1990. She graduated from Koç University's nursing college in 2013 and from Koç University's Institute of Health Sciences in 2016. Now she is currently doctoral student in Koc University and serving as a lecturer in Bahcesehir University.