

EUPSA 2019

EUROPEAN PAEDIATRIC SURGEONS' ASSOCIATION



ABSTRACT BOOK

**20th ANNUAL CONGRESS OF THE EUROPEAN PAEDIATRIC
SURGEONS' ASSOCIATION**

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PW3TH05: THE MUSCULOSKELETAL DEFORMITIES IN CONGENITAL DIAPHRAGMATIC HERNIA

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AIM OF THE STUDY

With the advancement in the treatment strategies of congenital diaphragmatic hernia (CDH), there is an increase in the survival rates. This increase led to an increase in the morbidity and extrapulmonary complications in long term such as failure to thrive, hernia recurrence, neurodevelopmental delay, gastrointestinal problems, and musculoskeletal anomalies. Herein, we aim to investigate the association between the long-term musculoskeletal complications in CDH patients and regarding the defect size, repair type, and perinatal parameters.

METHODS

After Institutional Review Board approval was obtained (2017-6361), a retrospective chart review was performed on CDH patients from 2003 to 2016. Patients who were operated due to left-sided isolated congenital diaphragmatic hernia and survived to date were included in the study. Data were collected on demographics, preoperative characteristics, operative interventions, and postoperative outcomes. Statistical analysis was performed with IBM SPSS Statistics 20.0.0 (Chicago, IL).

MAIN RESULTS

There were 98 patients of whom 33 (28.90%) had primary repair, 35 (30.70%) had patch repair, and 46 (40.40%) had muscle flap repair. The median age of the patients was 6.00±3.83 years. Forty-five patients (45.9%) had large diaphragmatic defects, 28 patients (28.6%) had at least one type of musculoskeletal deformities, 2 of which were pectus carinatum, 16 were pectus excavatum and 18 were scoliosis.

CONCLUSIONS

Although there was a trend towards an increased risk of the pectus deformity and scoliosis in patients repaired with muscle flap, it did not reach statistical significance.

CDH Repair Type	pectus excavatum			scoliosis		
	RR	95% CI	p	RR	95% CI	p
Primary	0.66	0.23-1.88	0.422	0.24	0.06-1.01	0.025
Patch	0.97	0.35-2.74	0.959	1.12	0.45-2.84	0.807
Muscle Flap	1.45	0.59-3.54	0.414	2.28	0.97-5.37	0.053

Table 1: The relative risks (RR) of pectus excavatum and scoliosis deformities per repair type in congenital diaphragmatic hernia patients. (CI: Confidence interval)

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CERTIFICATE OF ATTENDANCE

This is to certify that

Emrah Aydin

PASIVNO UČEŠĆE/PARTICIPANT

Broj bodova/Number of credits 28

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