

PREOPERATIVE SONOGRAPHIC EVALUATION OF THE DEFECT SIZE IN CONGENITAL DIAPHRAGMATIC HERNIA: A PRELIMINARY REPORT

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Aim of the Study: To select a surgical approach for congenital CDH, we have performed preoperative ultrasound (p-US) to assess the defect size. The purpose of this pilot study is to evaluate the accuracy and usefulness of p-US in measuring the defect size and in selecting the surgical approach in CDH.

Methods: Medical records of five patients with CDH who underwent p-US and definitive repair from 2014 to 2017 at our hospital were reviewed.

Main Results: All patients were full-term neonates. Mean weight at birth was 2.7 ± 0.2 (2.5-3.1) kg. Age at p-US and at surgery were 1 ± 0.6 (0-2) days and 3.6 ± 1.3 (2-6) days respectively. The CDH was left-sided in 4 cases and right-sided in only one (case5). Estimated defect size by p-US / actual defect size in each patient were 23x25mm/20x26mm (case1), 23x30mm/20x30mm (case2), 32x33mm (posterior rim was not identified)/30x50mm (case3), almost total absence/40x50mm (case4), and 25x50mm/10x60mm (case5). According to the p-US findings we performed a successful thoracoscopic repair in cases 1 and 2 and an open repair in the other cases. In case 3, the posterior rim, not identified at p-US, needed to be exposed during operation. In case 4, a hernia sac was found intraoperatively and could be plicated. In case 5, temporary closure of the open abdomen was required due to liver herniation.

Conclusion: Estimated defect size and presentation of the diaphragmatic rim by p-US were almost identical with the actual intraoperative findings. This additional preoperative information might help in selecting a more appropriate surgical approach.

THE FACTORS ASSOCIATED WITH SUCCESSFUL EARLY ENTERAL FEEDING IN GASTROSCHISIS