

ASTERNIA: A CASE REPORT

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ABSTRACT

Absence of the sternum or asternia is the rarest developmental anomaly of the sternum. A female newborn is presented with asternia and ASD.

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INTRODUCTION

Absence of the sternum or asternia is a rare developmental anomaly of the sternum reported for the first time in 1968.¹ Since then, seven other cases have been reported from other parts of the world.⁸ Further reports dealt with repair of the anomaly.^{2,6,8} In this case report we present a case of asternia with intact skin.

CASE REPORT

In 1997 a female neonate was born in Fatemeh Hospital in Hamadan (western Iran). She was born through NVD with a first minute APGAR score of 9 and fifth minute APGAR score of 10, weighing 2900 grams. During examination of the newborn, asternia was observed. The region was covered with a thin skin which harbored a midline scar and formed a nidus with secretions in the xiphoid region. The neonate's heart bulged outward when crying. Other examinations were normal and the neonate had no problem in feeding. In the radiography, asternia was obvious. Echocardiography revealed ASD. The mother reported no drug use or disease during pregnancy.

DISCUSSION

Formation of the sternum is accomplished during the seventh week of gestation. Any problem in this period could result in developmental defects or anomalies of the

sternum. Previous studies in Saudi Arabia⁸ have mentioned hypovitaminosis among other nutritional problems as the probable cause. All authorities agree with plastic surgery during infancy,⁶ because increase of the intrathoracic volume can lead to separation in the sternal region. Repair of the defect with autologous tissue (e.g., muscle) is preferred to Teflon grafts.⁸

Surgical prognosis was good in two reported patients.



Fig. 1. Appearance of the one day old newborn.

The parents of our patient didn't agree to undertake or continue any further diagnostic or surgical procedures.

After two months, she was examined again, and no problem was observed.

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