Seven months: the perfect time to complete the pectus excavatum correction

Claudio Andreetti¹*, Cecilia Menna¹, Francesco Cassiano¹ and Erino Angelo Rendina¹,²,³

¹ Division of Thoracic Surgery, University of Rome ‘Sapienza’ – Sant’Andrea Hospital, Rome, Italy
² Division of Thoracic Surgery, University of L’Aquila – ‘G. Mazzini’ Hospital, Teramo, Italy
³ Fondazione Eleonora Lorillard Spencer Cenci, Rome, Italy

* Corresponding author. Department Thoracic Surgery, Sant’Andrea Hospital, Via di Grottarossa 1035, 00189 Rome, Italy. Tel: +39-0633775773; e-mail: andreetticlaudio@gmail.com; claudioandreetti@libero.it (C. Andreetti).

Keyword: Pectus excavatum

The Ravitch procedure consists of chondrectomy of deformed cartilages, sternal wedge osteotomies and retrosternal placement of a small metallic bar (Fig. 1A and B). It is not clear when it is appropriate to remove metallic bar. Our experience demonstrated costal cartilage regeneration is shown with a complete correction of the deformity 7 months after surgery (Fig. 2A–C).

Figure 1: (A and B) Preoperative chest computerized tomography (CT) scan with tridimensional (3D) reconstruction of a patient with a severe pectus excavatum (Haller Index score, 4.57) who underwent the Ravitch correction with a bilateral chondrectomy from the 3rd to 10th costal cartilages.

Figure 2: (A) ‘Half-moon’ shaped skin incision (4 cm) used for the correction, performed in correspondence with the deepest depressed point of the chondro-sternal deformity, allowing an optimal exposure of the sternum. (B and C) Chest CT scan with 3D reconstruction at 7 months from correction showing complete regeneration from the 3rd to 10th costal cartilages. The metallic bar was removed after 7 months.