

PECTUS EXCAVATUM AND OTHER THORACIC DEFORMITIES: WHAT TO DO?"

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Background and Aims

Chest wall deformities such as pectus excavatum, pectus carinatum, and pectus arcuatum can have both functional and aesthetic implications. Multidisciplinary evaluation is essential for individualized therapeutic guidance. This study aimed to identify clinical patterns regarding symptoms, deformity type, aesthetic concerns, and therapeutic orientation among patients referred to a Multidisciplinary Chest Wall Deformity Clinic involving Thoracic Surgery and Physical and Rehabilitation Medicine of a central hospital in Lisbon.

Methods

We retrospectively analyzed first consultations conducted at the multidisciplinary clinic. Data collected included type of chest wall deformity, reported symptoms (e.g., chest pain, palpitations, dyspnea, fatigue), aesthetic perception, and therapeutic recommendations. Management options included vacuum bell therapy, dynamic compression orthoses, surgical correction (Nuss or Ravitch), or discharge without intervention.

Results

Among patients with pectus excavatum, 43% were advised to use a vacuum bell device. In the pectus carinatum subgroup, 73% were recommended a dynamic compression brace. Overall, 25% of patients with chest wall deformities were either placed on a surgical waiting list or were under follow-up after bar placement. Only 12% (19 out of 163 patients with deformity) were awaiting initial surgical intervention. Aesthetic concern was noted in approximately 55% of patients with a deformity. This concern was highest among those with pectus excavatum, with 73% expressing aesthetic discomfort.

Conclusion

This multidisciplinary approach enabled comprehensive evaluation and tailored treatment strategies. Vacuum bell therapy and dynamic compression orthoses were the most commonly recommended non-surgical treatments. While aesthetic concerns were frequent, particularly in pectus excavatum, most patients were managed conservatively. These findings help establish patterns that may inform clinical decision-making and resource allocation in chest wall deformity management.

Keywords: Pectus; Vacuum bell; Thoracic deformities