



NEW PECTUS UP: EXTRATHORACIC TECHNIQUE FOR PECTUS EXCAVATUM TREATMENT

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Introduction: Pectus Excavatum is the most common congenital deformity of the chest cavity, characterized by a concave depression of the sternum, better known as a funnel chest. This condition can severely affect the quality of life of patients, both children and adults, making it difficult for them to adapt to activities of daily living, as well as causing skeletal and systemic complications if the deformity is not corrected. Beyond a good physical appearance, corrective surgery is essential and Pectus Up offers an ultimate solution, with a minimally invasive technique, to all types of Pectus Excavatum.

Methods: The new generation of Pectus Up is an extrathoracic and virtually painless procedure, which involves a short period of convalescence and is free of serious complications. The technique consists on placing an implant above the sternum at the subpectoral level to definitively correct the deformity by using an external elevation system. The surgery is a low complexity procedure that requires a minimum incision of about 4 cm.

Results: Since its commercialization in 2015, more than 90 professionals have been involved in more than 180 surgeries performed in more than 20 countries around the world. After the Pectus Up launch, improvements have been continuously implemented in the implant and in the surgical method itself. With the new generation of Pectus Up, the surgery is further simplified, enabling a quick learning curve and an easy execution of the technique, thus achieving a definitive solution for the patient. In addition, patients' safety is not compromised, since the technique allows for CPR and implies a low cost to the health system. The new Pectus Up enables to widen the target to children and adults, as well as patients affected by Pectus Excavatum with greater degree of asymmetry and sternal rotation, patients with a previous history of heart surgery, relapsing patients of other techniques such as Ravitch and Nuss, or patients facing purely aesthetic treatments failures. By placing value on the main point, which is the high satisfaction of the patients and surgeons themselves, the new generation of Pectus Up becomes one of the best corrective surgical options currently in existence.

Discussion: to what extent do the patient and the surgeon himself value safety and risk exemption? To what extent does a patient affected by Pectus Excavatum not want a corrective

and definitive solution to the deformity? How does a surgeon assess the simplicity of such a kind of surgery and with such a quick learning curve?

Conclusion: this is an evolved technique that is welcomed with the backing and the experience of more than 90 surgeons around the world who trust the Pectus Up with more than 180 surgeries performed worldwide. The new generation of Pectus Up is currently leading the corrective surgery of the Pectus Excavatum and has relevant benefits, among which the simplicity and safety of the operation stand out.

Bibliography:

Taulinoplasty: the traction technique—a new extrathoracic repair for pectus excavatum. *Annals of Cardiothoracic Surgery*, 5(5), 519–522.