

LIVING WITH PECTUS EXCAVATUM

Pectus Bar Using the Nuss Procedure



PECTUS EXCAVATUM IS NOT PREVENTABLE, BUT IT IS TREATABLE.

Searching for options when it comes to Pectus Excavatum (sunken chest) can be overwhelming. Thankfully, there is a minimally invasive surgery using the Pectus Support Bar called the Nuss Procedure.

Surgical treatment of pectus excavatum is intended to reduce pressure on vital organs and create a more normal chest shape by repositioning the chest including the ribs, sternum or “breastbone,” and the cartilage that connects the ribs to the sternum¹. Zimmer Biomet has developed the Pectus Support Bar, in collaboration with Dr. Donald Nuss, for patients seeking a less invasive treatment option.

Carefully reviewing the available options for pectus surgery will allow you to make an informed decision as to what procedure may correct the chest deformity.





Nuss Procedure^{2,4} 1- to 2-hour long surgery corrects the shape of the chest by using a curved metal bar that is placed under the breastbone. With the help of a small camera, the surgeon will create a pathway across the chest under the breastbone and insert a Pectus Support Bar. The bar is shaped to fit the patient and lifts the chest into a normal shape. As the bar pushes the breastbone forward, it bends the cartilage that holds the breastbone to the ribs, promoting that cartilage to heal in a new, normal shape.

Primary benefits of this minimally-invasive procedure include a shorter operating time, less blood loss, and smaller, less visible incisions.³ The Nuss Procedure is a widely-accepted effective method for treating pectus excavatum.⁵

Only a medical professional can determine the appropriate treatment for your specific condition. Talk to your doctor about the Nuss Procedure and the associated risks, which include, but are not limited to, allergic reaction to metal, pain, surgical trauma, skin irritation, fracture of implant, incomplete remodeling of the deformity, permanent injury, or death.⁶

The information herein is of a general nature and does not represent or constitute medical advice or recommendations and is for general education purposes only. The information includes descriptions of a medical device that a surgeon may choose for the repair of Pectus Excavatum.

Zimmer Biomet manufactures medical devices, including the Pectus Support Bar and stabilizers that may be used by your surgeon to repair the pectus deformity. We do not practice medicine all questions regarding your medical condition must be directed to your doctor(s).

Results with the Pectus Support Bar will vary due to health, weight, activity and other variables. Not all patients are candidates for this product and/or procedure. Only a medical professional can determine the treatment appropriate for your specific condition. Appropriate post-operative activities will differ from patient to patient. Talk to your surgeon about whether the minimally invasive Nuss procedure and the Pectus Support Bar is right for you and the associated risks, therewith, including but not limited to the risks of allergic reaction, pain or discomfort, infection, fracture, breakage, movement or loosening of the bar, inadequate or incomplete remodeling of the deformity or permanent injury or death. For a complete list of risks associated with Zimmer Biomet's Pectus Support Bar, see www.pectusbar.com risk page.

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1. Nuss, D., Obermeyer, R. J., & Kelly, R. E. (2016). Nuss bar procedure: past, present and future. *Annals of cardiothoracic surgery*, 5(5), 422.
2. <https://medlineplus.gov/ency/article/002949.htm>
3. Nuss, Donald, et al. "A 10-year review of a minimally invasive technique for the correction of pectus excavatum." *Journal of pediatric surgery* 33.4 (1998): 545-552.
4. Nuss, Donald, and Robert E. Kelly. "The Minimally Invasive Repair of Pectus Excavatum." *Operative Techniques in Thoracic and Cardiovascular Surgery* 19.3 (2014): 324-347.
5. Protopapas, Aristotle D., and Thanos Athanasiou. "Peri-operative data on the Nuss procedure in children with pectus excavatum: independent survey of the first 20 years' data." *Journal of Cardiothoracic Surgery* 3.1 (2008): 40.
6. Pectus Support Bar IFU 01-50-1049

For more information visit www.PectusBar.com