3D printing model assist Nuss procedure

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Abstract

Purpose

We report a technique of that 3D printing model assist novel Nuss procedure (3DPMAN) was used to help with the planning of the Nuss procedure and shaping the Nuss bar in Pectus excavatum (PE) patient.

Description

A patient with PE. We visualized and reconstructed the computed tomography imaging scans of this patient to create 3D model of chest contour and predict the shaped Nuss bar.

Evaluation

This technique of 3D printing model is very helpful in simulation and planning the Nuss procedure. It also reduced the intraoperative bending time and decreased the times of repeat insertion the Nuss b into the pleural cavity.

Conclusion

3DPMAN is a useful technique. 3DPMAN can be expected to improve preoperative planning and a decrease in the risk of Nuss procedures.