

Pulmonary Artery Banding: Experience with Upper Mini-Sternotomy.

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- **Background.** Pulmonary artery banding (PAB) remains an essential technique in contemporary cardiac surgery. Traditional approaches include median sternotomy, left lateral thoracotomy, and left anterior thoracotomy. Recently, the upper mini-sternotomy approach has gained attention in various centers. This study aims to share our experience with this technique, report patient outcomes, and evaluate its impact on facilitating redo surgeries.
- **Methods.** Since 2022, the upper mini-sternotomy approach for PAB has been adopted at our center. This retrospective study analyzed 12 patients who underwent PAB using this technique (image1). Indications included complete atrioventricular septal defect, multiple muscular ventricular septal defects, and divers univentricular hearts with increased pulmonary blood flow.
- **Results.** The median age at the time of PAB was 7.6 months (± 6.9), with a median body weight of 6 kg. The median peak gradient across the band was 45 mmHg. There was no in-hospital mortality in our cohort. Four patients underwent redo surgeries, with no associated mortality or sternotomy-related complications. Adhesions were limited to the site of pericardial opening, significantly easing the second-stage procedures (image 2).
- **Conclusion.** The upper mini-sternotomy approach for PAB is a safe and effective technique. It facilitates subsequent redo surgeries and offers a valuable alternative to traditional surgical approaches.
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