

## Esophageal stethoscope in thoracoscopic interruption of patent ductus arteriosus

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### Abstract

There is a significant rate of residual or recurrent ductal patency after video-assisted thoracoscopic closure of patent ductus arteriosus. Between February 2000 and October 2004, this procedure was carried out on 140 consecutive patients in whom heart sounds were monitored intraoperatively with an esophageal stethoscope. Changes in continuous cardiac murmurs were recorded after placing the 1st and 2nd vascular clips. There was no ductal flow after clipping twice in 138 (98%) patients; in the other 2, residual flow was abolished at the 3rd attempt. All patients left the operating room with no residual ductal patency on echocardiography. After 6 months, there was no incidence of residual patency. Intraoperative esophageal stethoscopy provides remarkably loud and clear heart sounds for direct monitoring and reliable evaluation of the entire course of thoracoscopic patent ductus arteriosus closure, without interrupting the surgical procedure, thus avoiding re-intervention and complications associated with residual ductal flow.

### Reaxys Database Information

### Indexed Keywords

**EMTREE medical terms:** adolescent; adult; article; child; clip; Doppler echocardiography; echocardiography; esophagus stethoscope; follow up; heartmurmur; human; infant; length of stay; major clinical study; operation duration; patent ductus arteriosus; stethoscope; surgical technique; thoracoscopy; trans thoracic echocardiography

**MeSH:** Adolescent; Adult; Child; Child, Preschool; Ductus Arteriosus, Patent; Equipment Design; Esophagus; Follow-Up Studies; Heart Sounds; Humans; Infant; Infant, Newborn; Monitoring, Intraoperative; Reproducibility of Results; Retrospective Studies; Stethoscopes; Thoracic Surgery, Video-Assisted

*Medline is the source for the MeSH terms of this document.*

**ISSN:** 1875-923 **CODEN:** ACTAF **Source Type:** Journal **Original language:** English

**PubMed ID:** 1867002 **Document Type:** Article