

Subxiphoid Single-port Thymectomy: Eight-year Experience in Single Center

DO KYUN KANG

Korea Institute of Radiological & Medical Science, Seoul, Korea

Korea Institute of Radiological & Medical Science, Seoul, Korea

BACKGROUND

- Subxiphoid single-port thymectomy has several advantages compared with conventional approaches in post-operative pain and cosmetic results.
- However periopeartive outcomes are still lacking. We would like to present our 8-year experience of subxiphoid single-port thymectomy.

METHODS

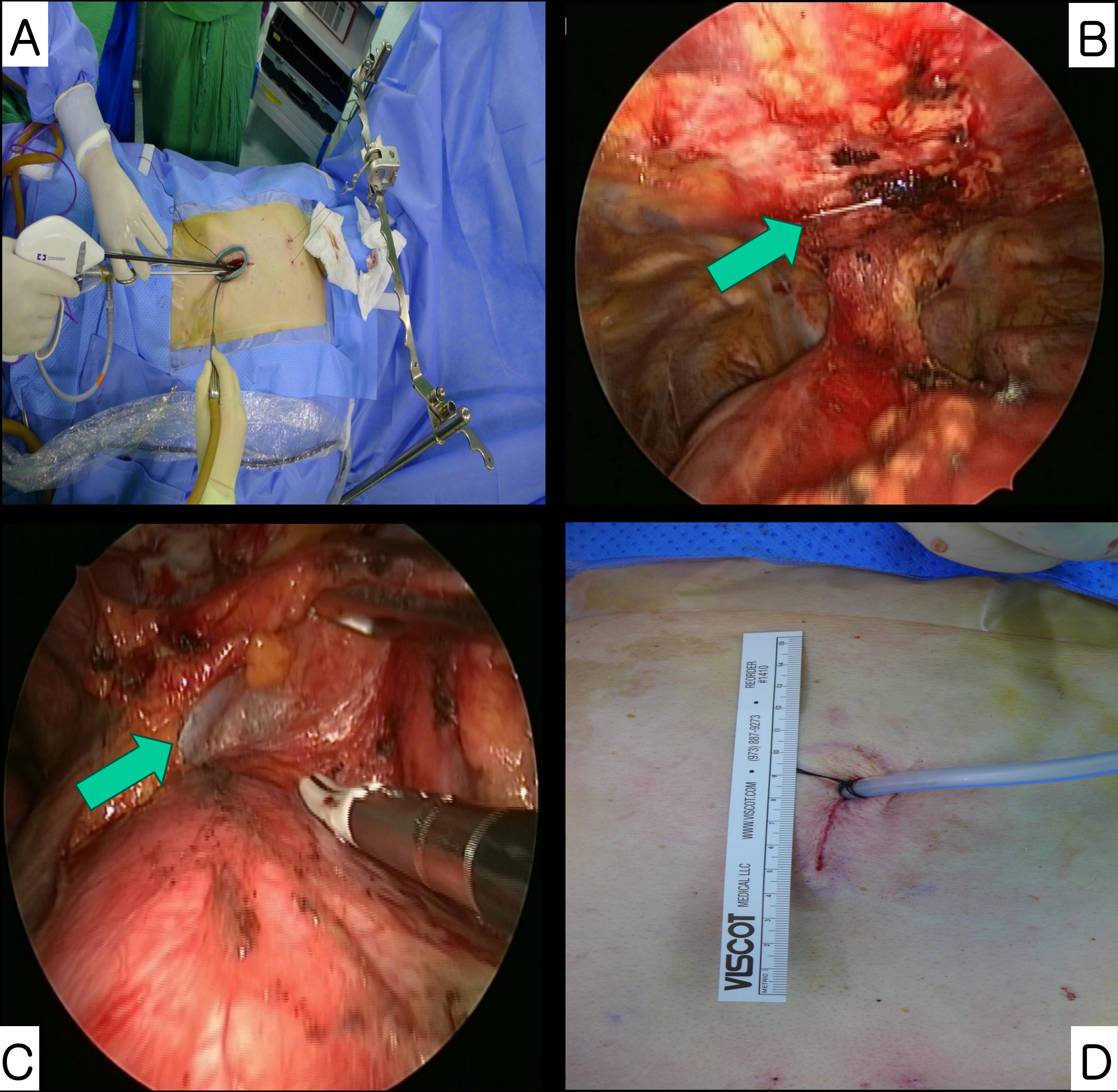
- Duration: August 2014 – December 2022
- All consecutive 71 patients undergoing subxiphoid single-port thymectomy.
- We reviewed retrospectively the medical records of these patients.

SURGICAL PROCEDURE

- Instruments
 - X-small Alexis wound retractor (Applied Medical, Rancho Santa Margarita, CA, USA)
 - 5mm-30° video thoracoscope (Karl Storz endoscope; Karl Storz, Tuttlingen, Germany)
 - 5mm-endoscopic grasper
 - Endoscopic Energy device
 - Kent retractor & wire
- General anesthesia
- Double lumen endotracheal tube
- Position: supine
- Subxiphoidal incision (about 4-5cm, veritcal)
- Resection of the xiphoid process
- Blunt dissection of the retrosternal space by finger
- Opening of the mediastinal pleura bilaterally
- Wiring below the sternum through the 3rd of 4th ICS horizontally
- Retraction of wire using Kent retractor for securing the retrosternal space
- Thymectomy under one-lung ventlation (Right <-> Left)

RESULTS

Category	Outcomes
Male (n, %)	37 (52.1)
Age, years	58 (48, 69)
Operative time, min	150 (105, 180)
Operative blood loss, ml	160 (100, 260)
Conversion (n, %)	
Median sternotomy	2 (2.8)
Transthoracic approach	2 (2.8)
Cause of conversion (n, %)	
Massive bleeding	4 (5.6)
Chest tube duration, days	3 (2, 4)
Length of stay, days	5 (4, 7)
Histology	
Thymoma	49 (69.0)
Thymic carcinoma	11 (15.5)
Other thymic benign tumor	11 (15.5)
Postoperative complication (n, %)	
Phrenic nerve palsy	1 (1.4)
Atrial fibrillation	1 (1.4)
Perioperative mortality	0
Median length of follw-up, month	37 (17, 110)
Recurrence (n, %)	2 (2.8)



A: Kent retractor lifting the sternum for securing the retrosternal space

B: Wire under the sternum

C: Operative finding, arrow, innominate vein

D: Postoperative wound

CONCLUSIONS

- Subxiphoid single-port thymectomy is a safe and feasible modality with few complication and no reported case of mortality.