





Uniportal VATS Bulla Looping for Secondary Pneumothorax Patients with Poor Respiratory Reserve

**Toshiaki MORIKAWA
Yuto WATANABE**

**Dept. of Thoracic Surgery,
Tokyo General Hospital
Tokyo, JAPAN**





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COI Disclosure Information
Presenter : Toshiaki Morikawa

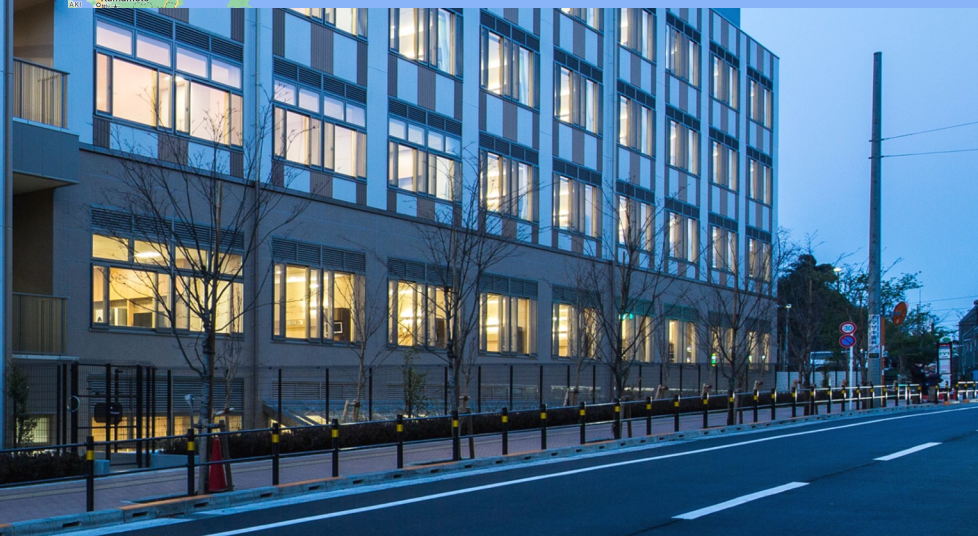
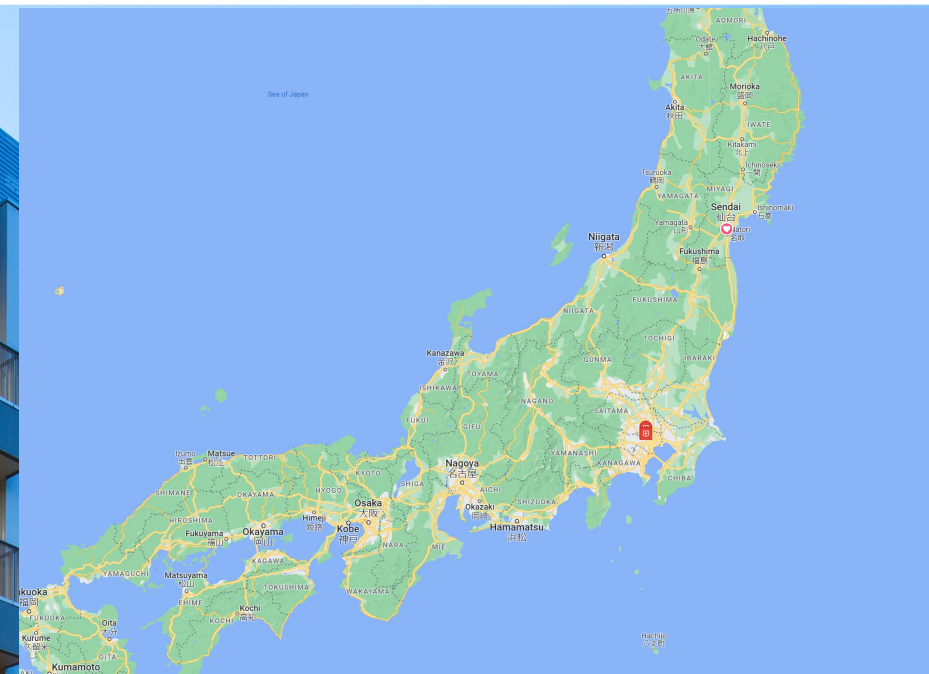
I have no financial relationships to disclose.



Tokyo General Hospital Egota, Nakano-City, Tokyo



総合東京病院





ENDOLOOP



PDS-II, 0 thread

absorbable, thick thread

non-traumatic

less costly



ENDO-Stapler



Metal made staples

non-absorbable, thin staples

traumatic

more costly



An Incident Report in 2013

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CASE REPORT - THORACIC

Haemothorax following bullectomy caused by a sharp edge of the Endoloop

Hajime Otsuka, Yoshinobu Hata*, Keigo Takagi and Fumitomo Sato

Department of Chest Surgery, Toho University Medical Center Omori Hospital, Tokyo, Japan

* Corresponding author. Department of Chest Surgery, Toho University Medical Center Omori Hospital, 6-11-1 Omori-nishi, Ota-ku, Tokyo 143-8541, Japan.
Tel: +81-3-37624151; fax: +81-3-37663551; e-mail: yoshinobuhata@hotmail.com (Y. Hata).

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Abstract

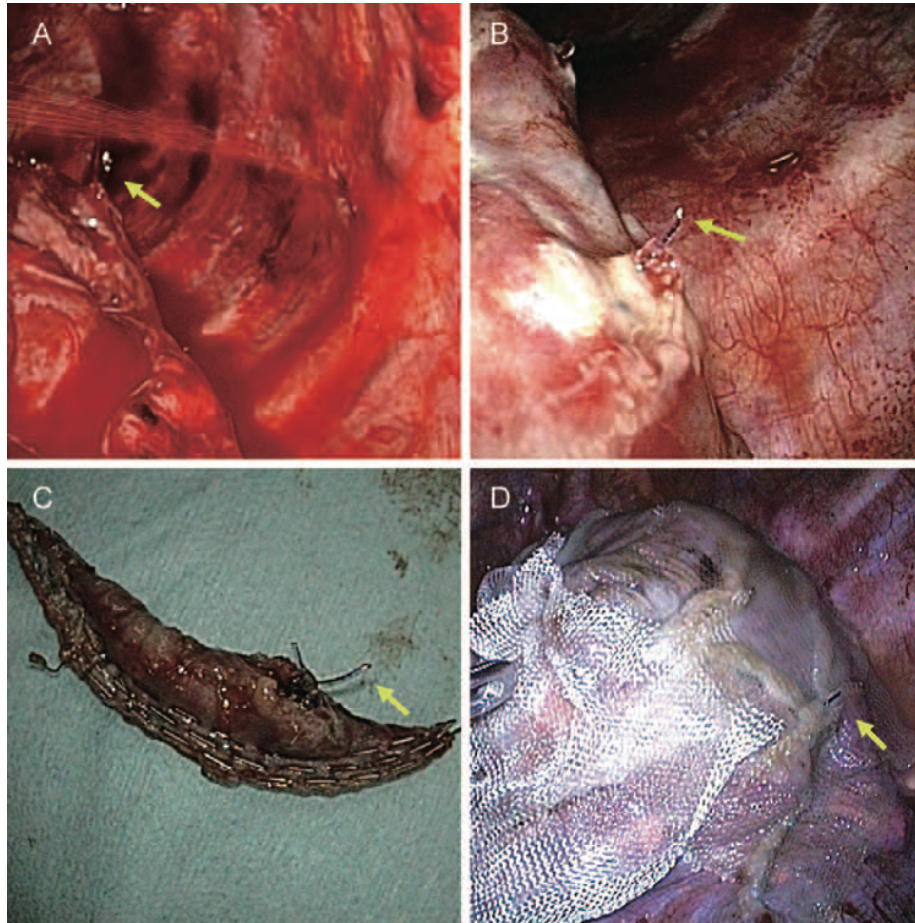
A 22-year old man presented with a massive haemothorax 25 days after bullectomy for a spontaneous pneumothorax. Thoracoscopic surgery revealed ongoing bleeding from the chest wall caused by a sharp edge of the Endoloop Ligature (Ethicon Endo-Surgery) used to resect the remaining small part of the lung at the earlier staple bullectomy. The point where bleeding was occurring was clipped and covered using a collagen patch coated with human fibrinogen and thrombin. The protruding sharp edge of the Endoloop was excised together with the surrounding lung tissue, using a stapler. Although prevention of this type of complication is difficult, awareness of the potential problem may help in managing such extremely rare events.

Keywords: Postoperative haemothorax • Endoloop • Video-assisted thoracic surgery • Bullectomy

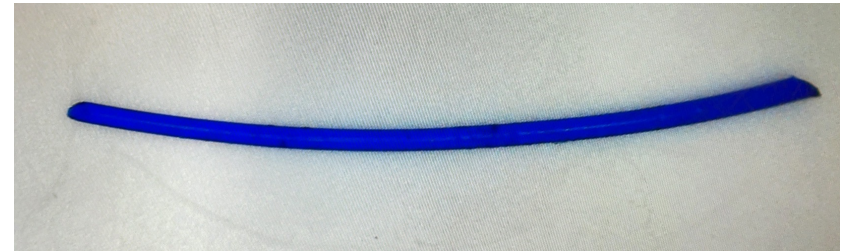
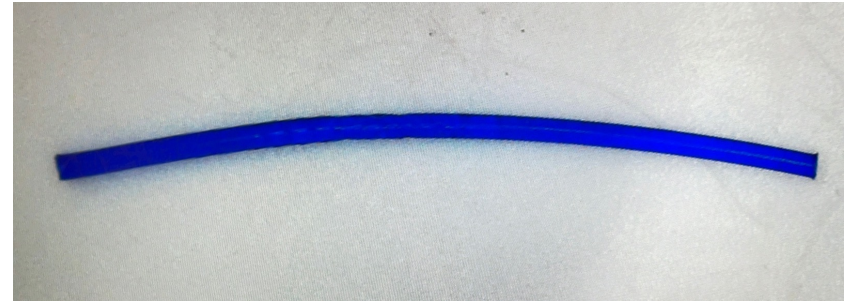
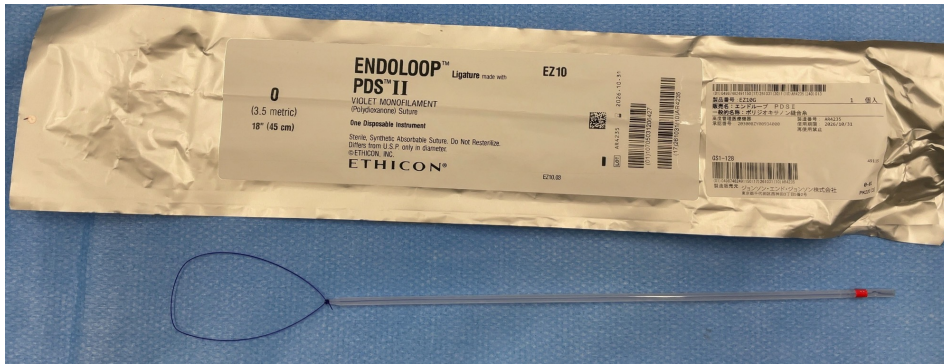


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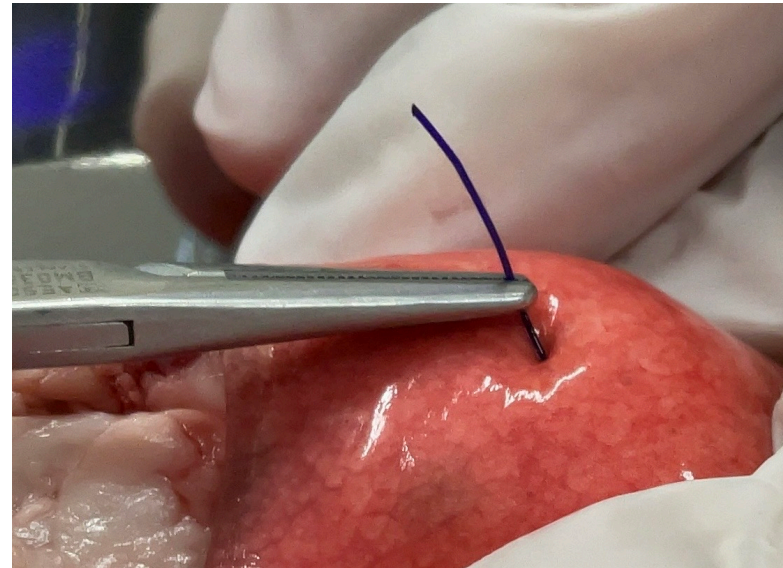
An Incident Report in 2013



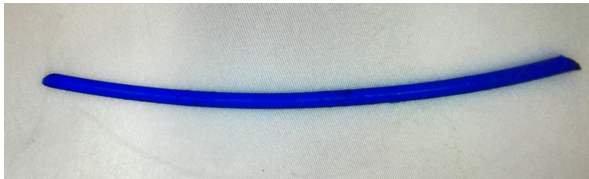
Certify if ENDOLOOP traumatizes organs



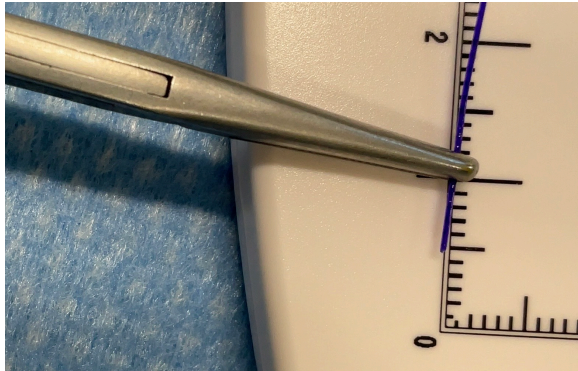
Retrieved Porcine Liver and Lung



Thread pierced the organs when...



Sharp Edge



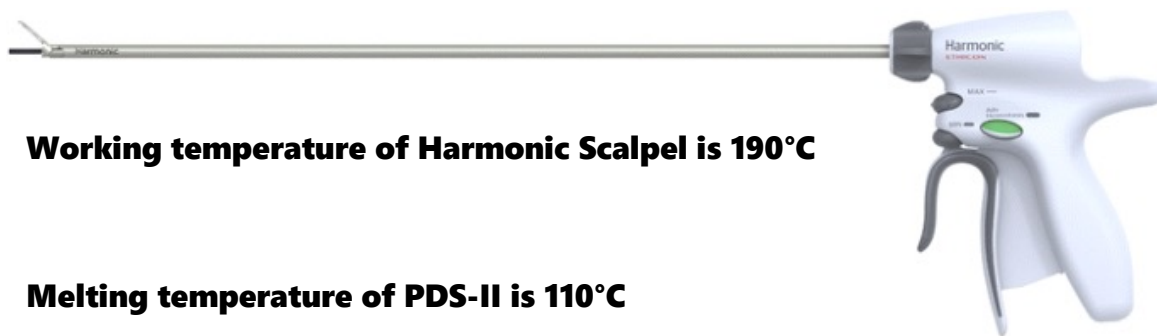
Held at 5 mm from end



Punctured!

Tensile on the surface

Cut by Harmonic Scalpel

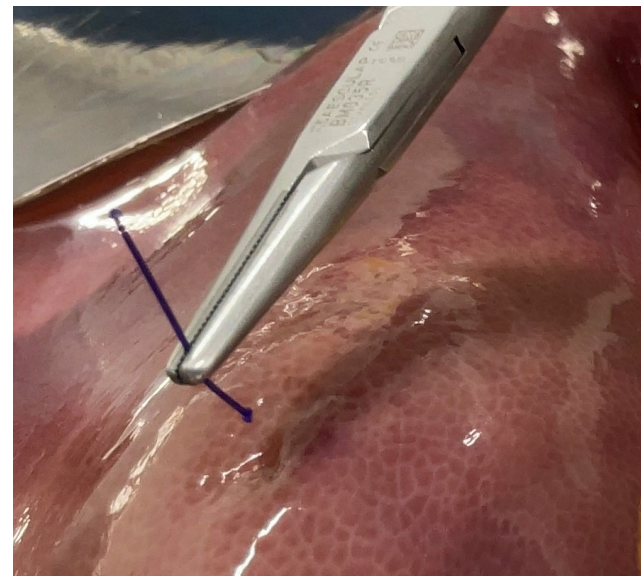


Working temperature of Harmonic Scalpel is 190°C

Melting temperature of PDS-II is 110°C



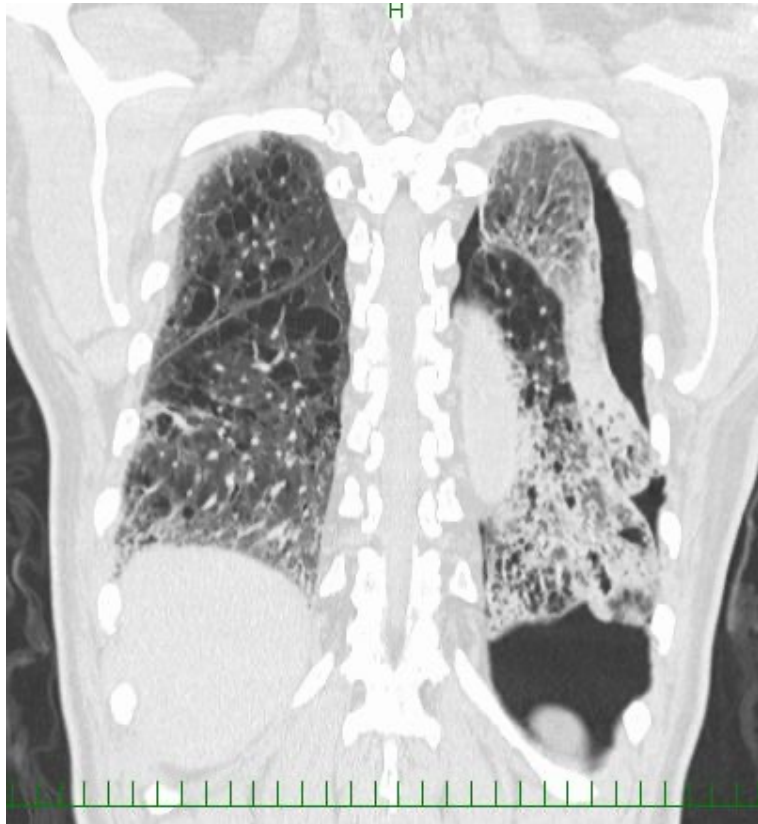
Edges transformed dull



No puncture!

Same as similar heating instruments

A Secondary pneumothorax patient



A 78-year-old male patient, who was a smoker and had no other significant complaint other than hypertension, presented sudden severe chest pain and was sent by ambulance.

A left-side Pneumothorax was evident. A chest tube was placed right at once. Massive air leakage was seen. O2 was inhaled by a face mask.

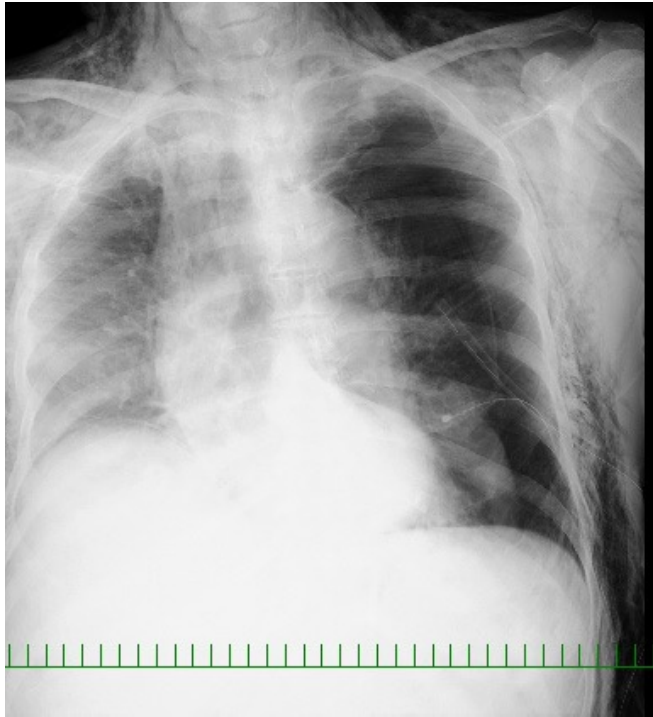
Secondary pneumothorax with emphysema



Soon, pneumonia of the left upper lobe was evident combined with elevated serum data of inflammation. Chest physicians treated medically.

Severe air leakage continued, subcutaneous emphysema was remarkable, and spontaneous respiration with O₂ installation was continued.

Secondary pneumothorax with emphysema



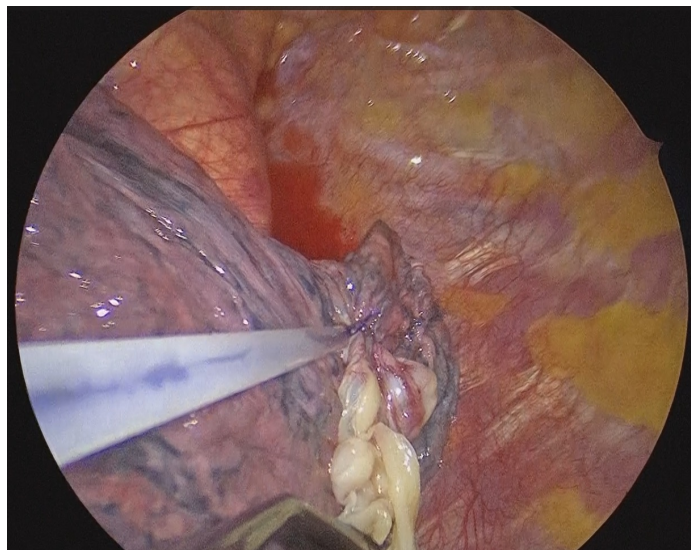
**Within a week, pneumonia had fairly subsided.
Severe air leakage continued.**

On the 9th hospital day, the surgical procedure was undergone.

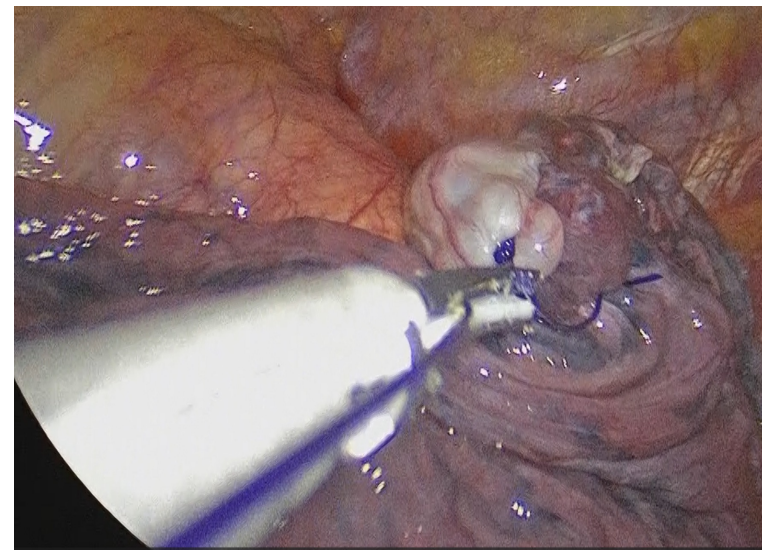
Surgery Scenes



Uniportal VATS



Ligation with ENDOLOOP



Cut by Harmonic Scalpel

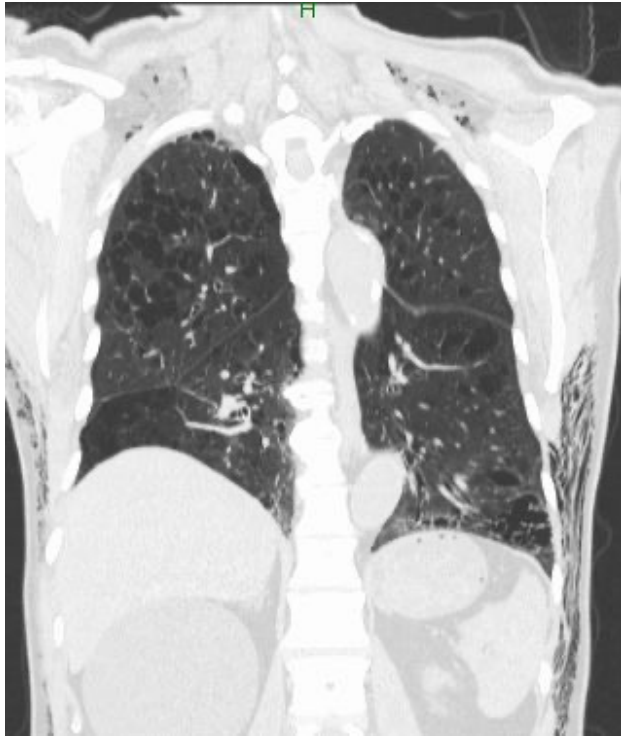


**Uniportal VATS
Bulla Looping for
Secondary
Pneumothorax
Patients with Poor
Respiratory
Reserve**

Toshiaki Morikawa M.D.



After Surgery



8 POD

Air leakage completely disappeared, recovery was uneventful, and the patient was discharged on 4th operative day.

Three months after surgery, the lungs are fully expanded, and no scar of looping nor lung deformity is seen.

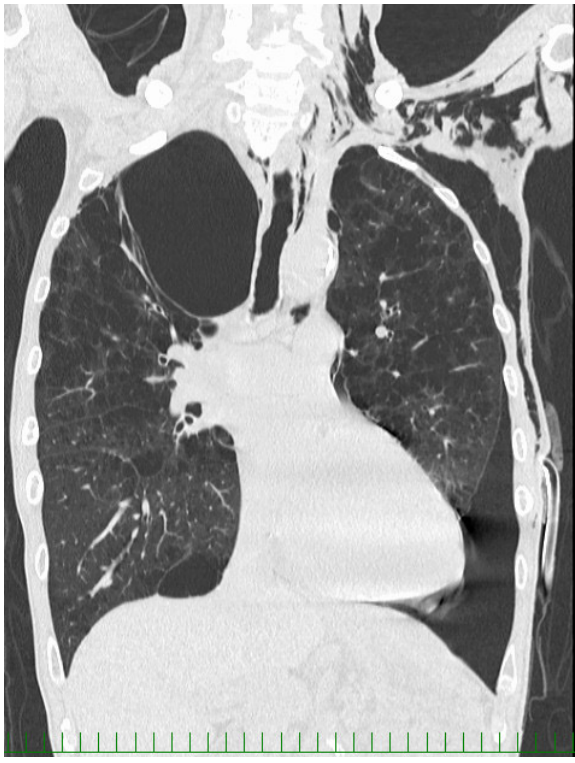
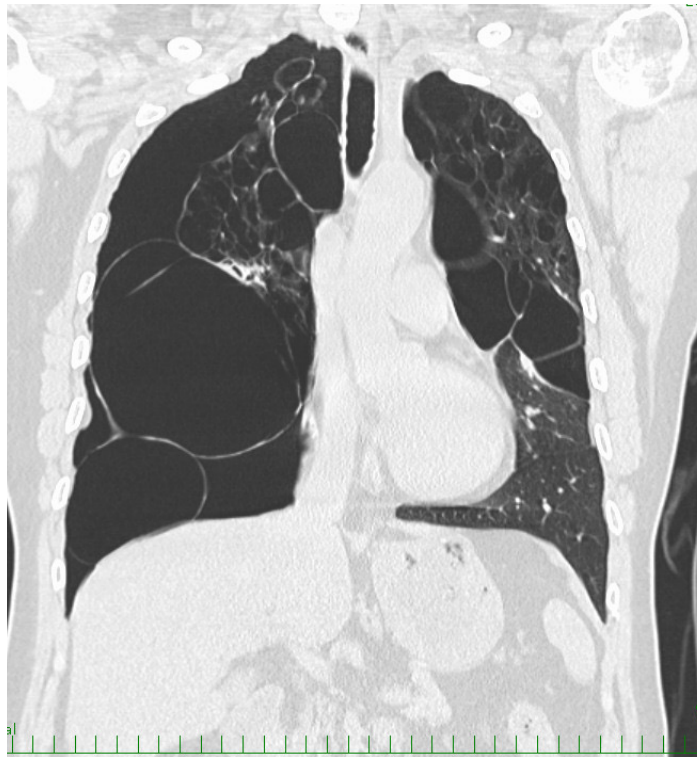
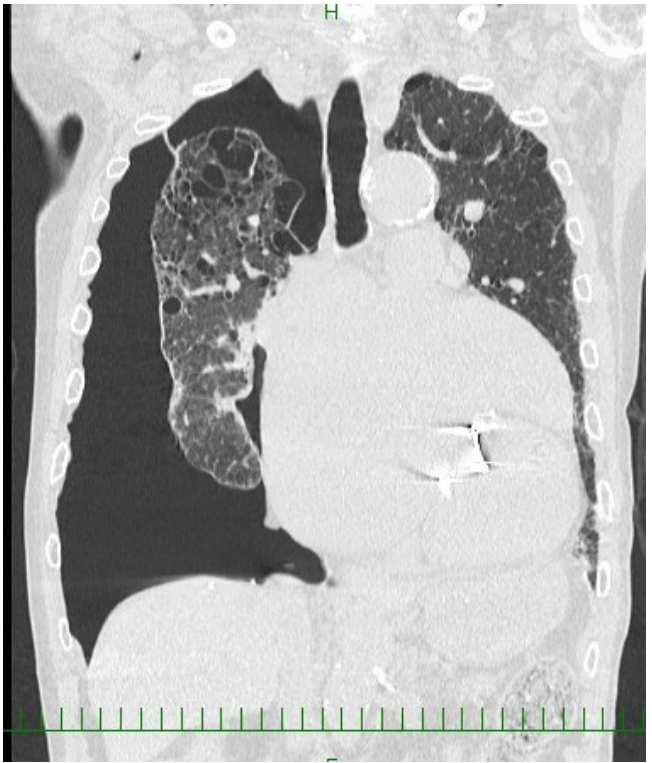


3 POM



Other Patients successfully treated by Uniportal VATS bulla looping





and so on...





Conclusions



- #1: ENDOLoop can ligate fragile bulla or emphysematous lung safely and securely**
- #2: ENDOLoop may puncture organs when the end is cut sharply**
- #3: ENDOLoop will not puncture organs when the end is cut with Harmonic Scalpel and/or other heating methods**
- #4: ENDOLoop is essentially non-traumatic, easy-to-treat, and less costly than Endo-stapler**
- #5: ENDOLoop may be useful for Uniportal VATS of high risk patients**



A scenic landscape photograph featuring Mount Fuji in the center, its snow-capped peak and blue-tinted slopes visible against a clear blue sky with some white clouds. The foreground is filled with numerous cherry blossom trees in full bloom, their light pink and white flowers framing the mountain. The overall scene is bright and clear, suggesting a sunny day in spring.

Thank you for listening



Similar Patients

