



TREATMENT ROLE OF

THORACOSCOPY FOR EMPYEMA

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Thorax ward of imam Reza hospital

History:

- ▶ Thoracoscopy was introduced over **100** years ago.
- ▶ **1866 : Francis Richard Cruise** in Ireland - probably the first to perform thoracoscopy .
- ▶ **1950 :** the pneumothorax treatment of tuberculosis .
- ▶ **1990 :** thoracic surgeons introduced (**VATS**) the technique for minimally invasive surgery

ANOTHER OPTION FOR THE PATIENT WITH AN INCOMPLETELY
DRAINED: *PARAPNEUMONIC EFFUSION IS THORACOSCOPY.*

(VATS) IS **SAFE** AND **EFFECTIVE** FOR THE TREATMENT OF
COMPLICATED PARAPNEUMONIC EMPYEMA

Indication:

1- FAIL CHEST TUBE DRAINAGE.

2- PATIENTS WHOSE LUNG DOSE NOT REEXPAND.

3- PATIENTS WHO BASED CT ARE NOT EFFECTIVELY TREATED WITH CHEST TUBES. (**LOCULATED** , **THICK PUS** , **THICK PLEURAL RIND**).

- ▶ **VATS exploration** is helpful before **6 weeks** have elapsed.
- ▶ **F.O.B** R/O endobronchial obstruction.
- ▶ **Chest CT scan** should be obtained before thoracoscopy:
anatomic information about the size and extent of empyema .

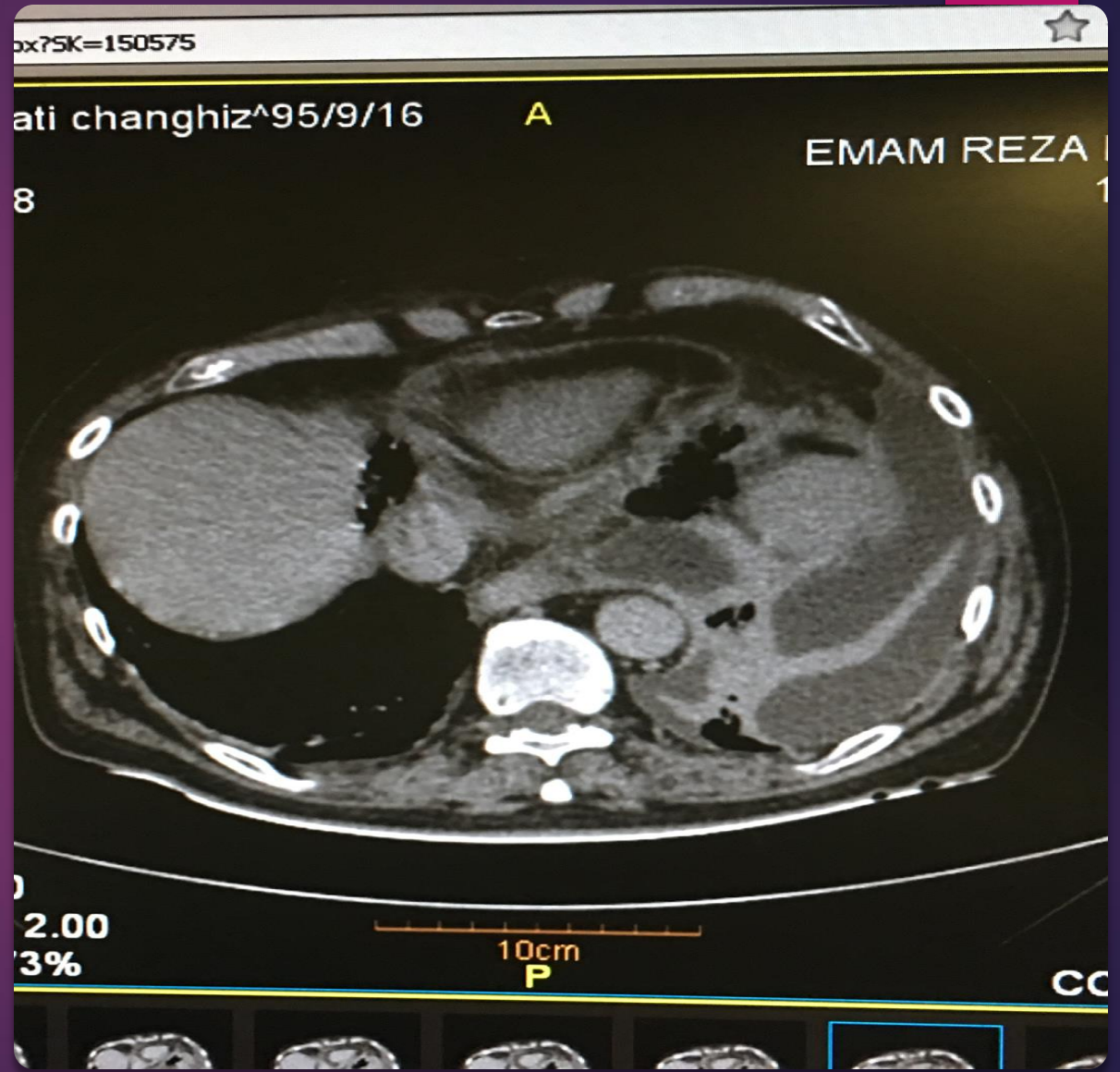
treatment should be performed:

- ▶ *before the adhesions become too fibrinous and adherent.*

With thoracoscopy

- ▶ the loculation in the pleural space can be disrupted.
- ▶ the pleural space can be completely drained.
- ▶ the chest tube can be optimally placed.
- ▶ the pleural surfaces can be inspected.

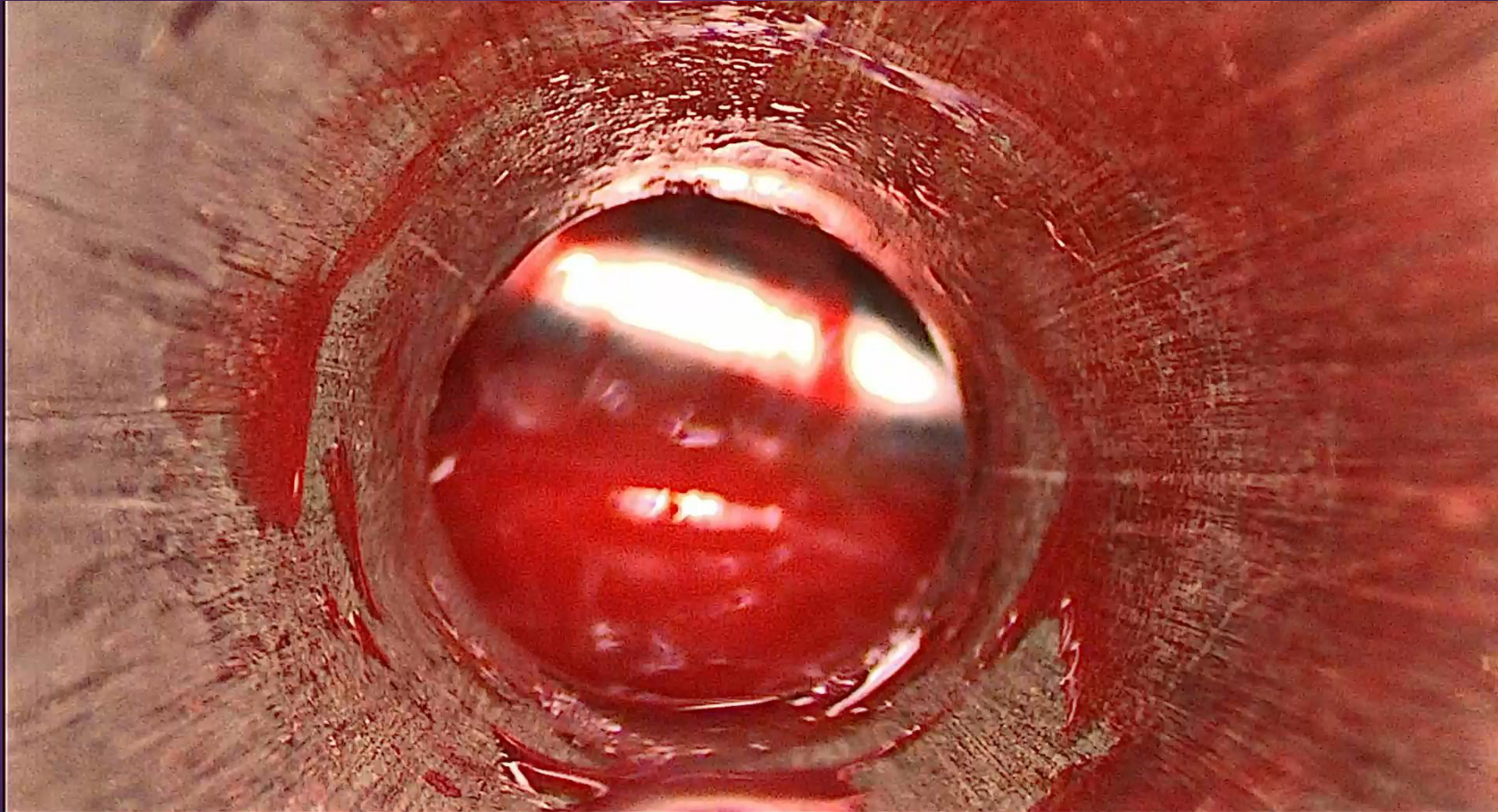
Empyema and left lobe collapse



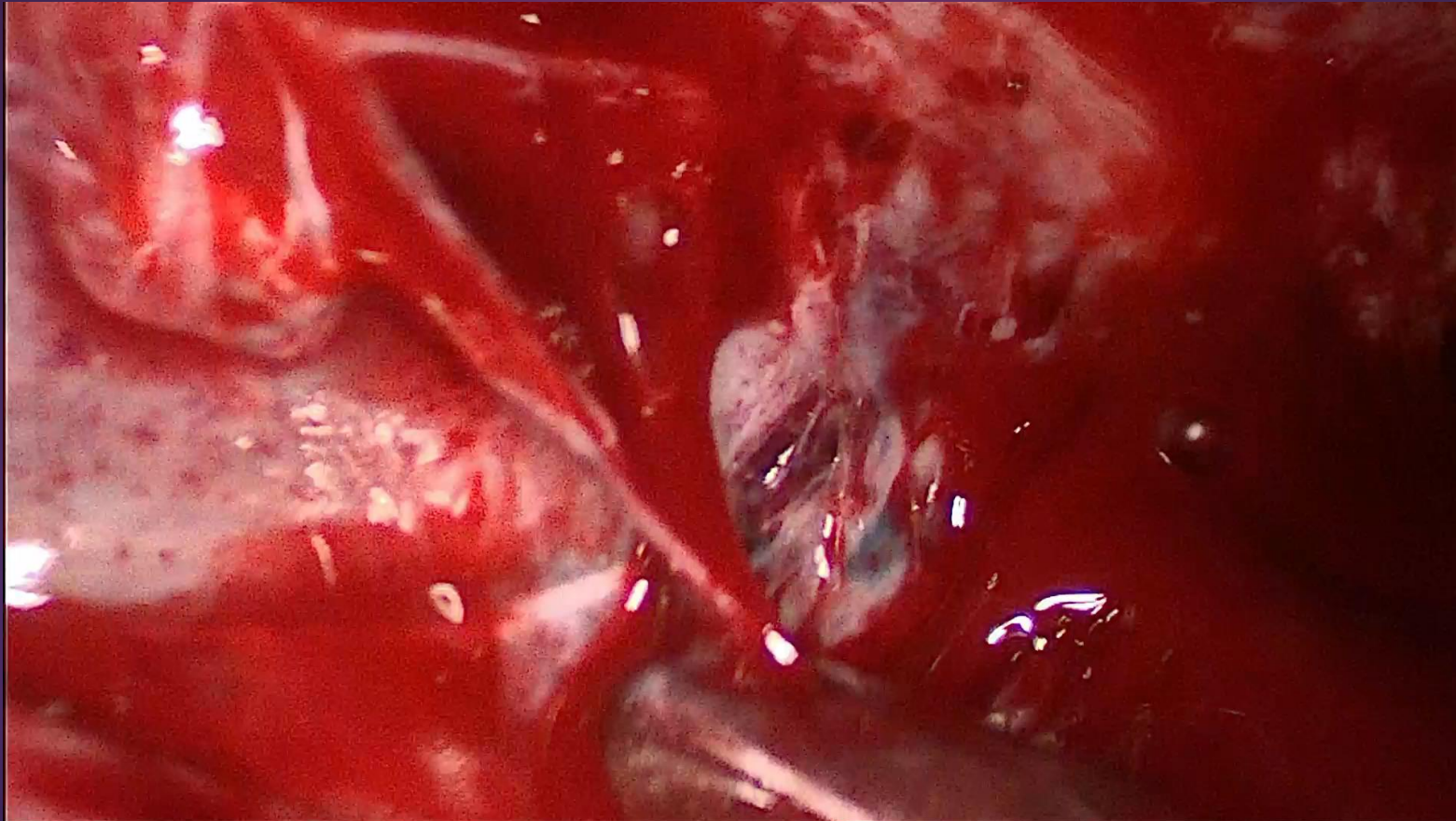
with thoracoscopy:

- ▶ the patient is found to have:
 - ▶ a **very thick pleural peel** with
 - ▶ a **large amount of debris** and
 - ▶ the **lung does not reexpand completely**
-
- ▶ then **decortication should be performed without delay**

آزاد کردن چسبندگی ها و برداشتن دبری ها



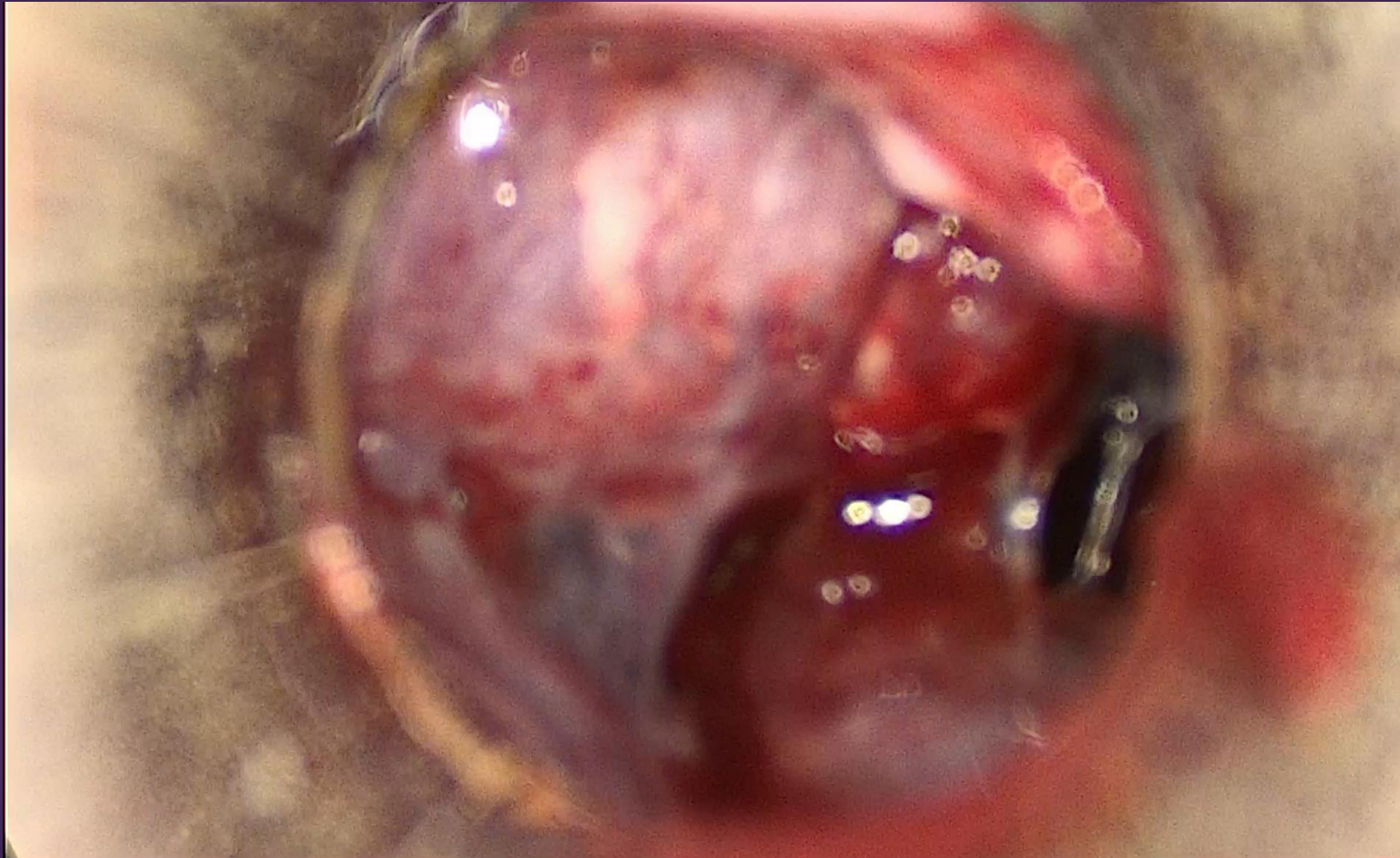
بر هم زدن لوکولاسیون ها



آقای جوان با آمپیم ۵ هفته ای و عدم پاسخ به آنتی بیوتیک و مصرف نامرتب آن ...



خانم جوان با سل پلورال و افیوژن و اینترایت ریه



CONCLUSION:

- ▶ *VATS is the method of choice in the treatment of :*
- ▶ stage II thoracic **empyema**
- ▶ with a potential for the infectious focus removal,
- ▶ targeted drainage and lung reexpansion.
- ▶ **VATS** is an alternative thoracotomy method for decortication in the early stage III **empyema**.

مرحوم زنده یاد استاد علی پورزند

