

Pleural drainage after diagnostic Medical Thoracoscopy(MT)

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Introduction

Unexplained pleurisy requires TM for diagnostic purposes, which ends with the placement of a chest drain, the question of the removal of the drain is not yet decided, this is the reason why we will contribute by our experience in this field to enrich the literature.

Methods and Materials

Retrospective study on files of patients admitted for TM diagnosis between 01-01-2006 and 31-12-2010.
 191 patients included for MT diagnostic in the study;(Tab 1)
 TM for pleurodesis and pneumothorax (PNO) excluded.
 TM is performed under local anesthesia with a single entry point, pleural exploration and biopsies performed on the parietal pleura.(Tab 1; photo 1+2+3)
 A chest drain 24 F is inserted and connected to a suction system at the end of the examination.(photo 4+5)
 Lung re-expansion is evidenced by the absence of bubbling, clinical, ultrasound and radiological examination which determine the decision to withdraw the drain.

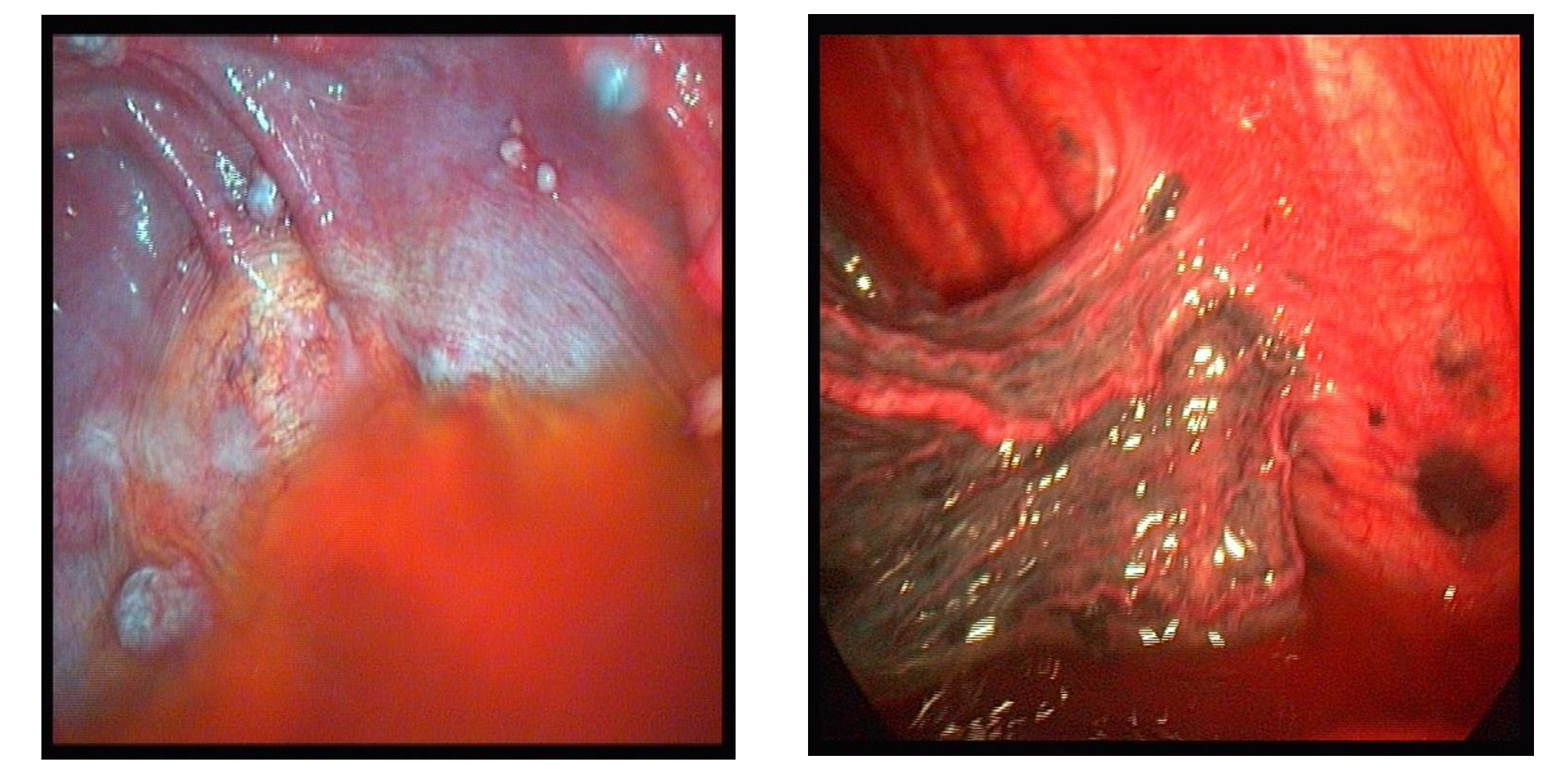


Photo 3

Photo 4



Photo 5: Drainage site

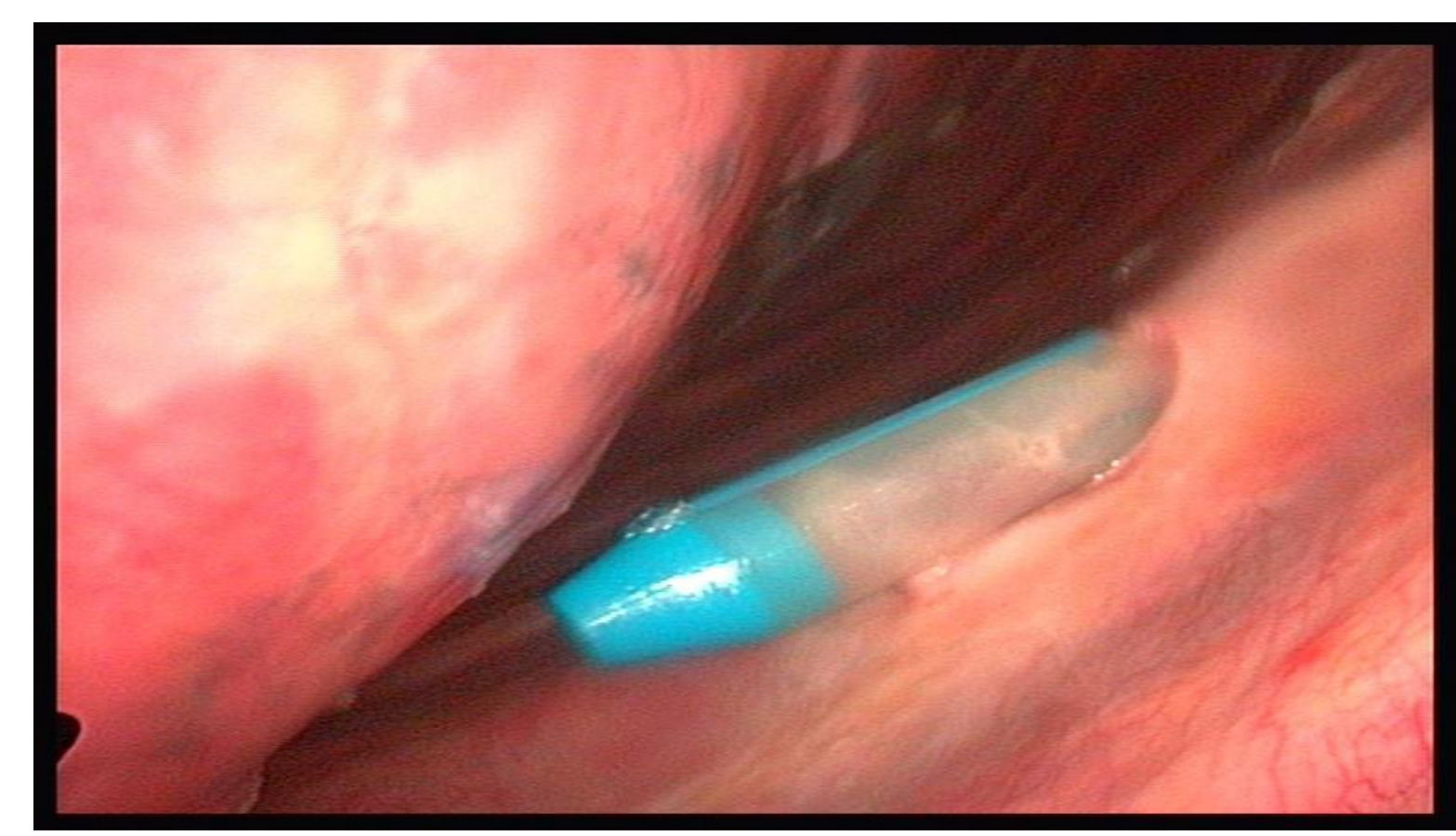


Photo 6: Vue of intrapleural drain



Photo 1. Rigid thoracoscope VA.

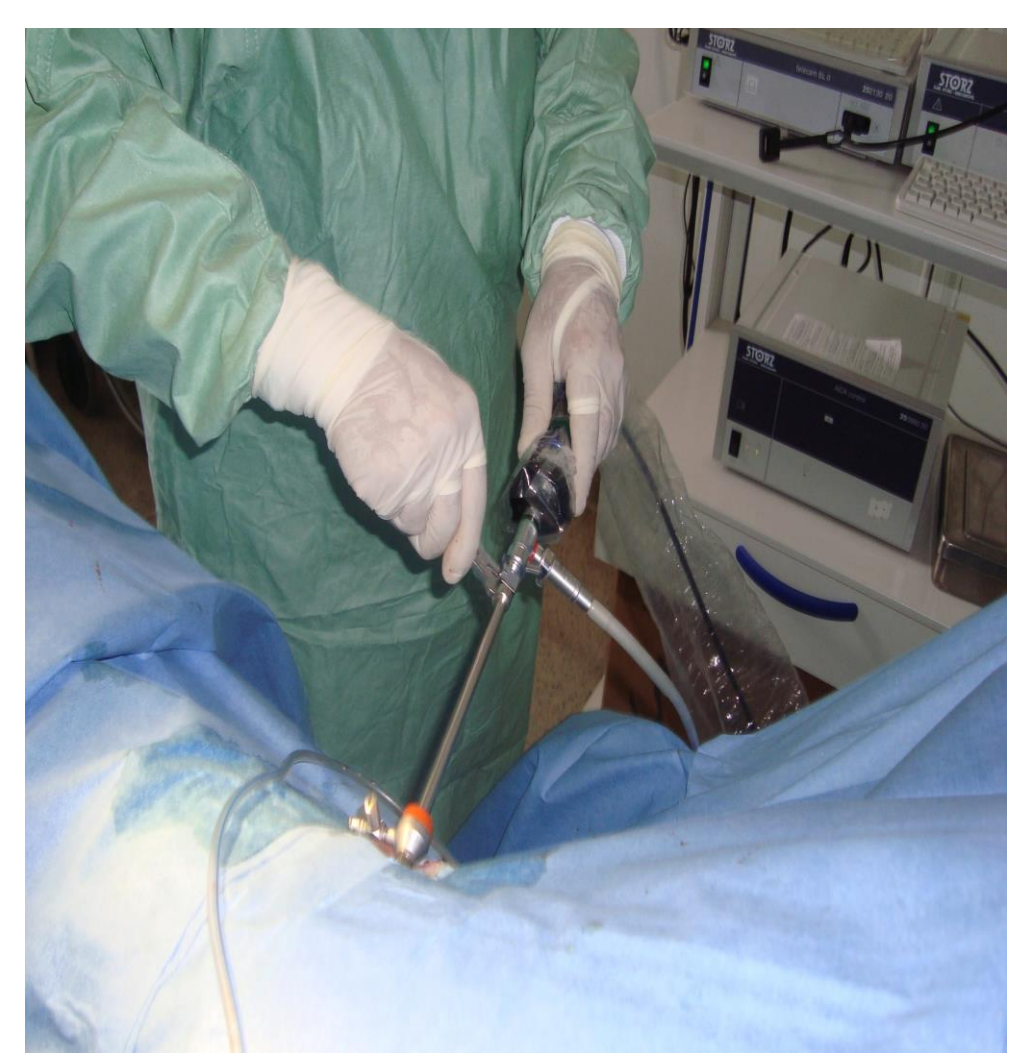


Photo 2. Uniportal entry.

Results

Free pleural cavity in 132 cases (73%) and reduced in 59.
 Out of 191,179 pleural biopsies performed, 85 (47.5%) malignant, 45 (25%) infectious, 41 (22%) non-specific inflammatory, 8 (4.5%) normal.
 No biopsy of visceral pleura or lung.
 Less than 4 hours of drainage in 121 cases (63%), 24 to 48 hours 52 cases (27%) more than 48 hours 18 cases (9%).
 Hospitalization was on average 14 days with 50% between 0 and 7 days, 30 % between 7 and 10 days, 18% more than 10 days.(Tab 1)
 Complications were rare 08 cases in total (4%): 2 subcutaneous emphysemas, 03 sepsis, 3 persistent PNO.

Results	Nombre Of Ptiens and (%) N: 191
Free pleural cavity	132 (73%)
Reduced cavity	59(27%)
Biopsys number	179(%)
Mlignant	85(47,5%)
Infectious	45(25%)
Non specific	41(22%)
Normal	8(4,5%)
Day of drain removal	
1	121(63%)
2	52(27%)
3 and more	18(9%)
Hospitalization duration	Average 14 days
0 to 6 days	50%
7 to 10 days	30%
More than 10	18%

Tab 1: Results

Discussion

Rapid removal (in less than 4 hours or even immediately) is possible, in our study it appears that: 63% removal before 4 hours, 90% removal within 48 hours following TM, which allowed us considerably shorten the duration of hospitalization and reduce morbidity and health costs. (Tab 2)

Results	Nombre Of Ptiens (%) SOTIM (N:558)	Our study N: 191
Local anaesthesia	436 (78%)	191 (100%)
General anaesthesia	122(22%)	0%
Number of entry points		
1	428(77%)	191(100%)
2	129(23%)	0
3	1(0,2%)	0
Day of drain removal		0
1	29(5%)	121(63%)
2	76(14%)	52(27%)
3	150(27%)	18(9%)
4	132(24%)	
5	96(17%)	
6 to 10	19(3%)	
Up to 10	4(1%)	

Tab 2: Discussion

Conclusions

There's no consensus around Pleural Drainage duration after diagnostic MT. An experienced team will decide for each patient according to the drying up of air and liquid, radiological control or the use of chest ultrasound at the end of the operation.

Conflict of interest: No conflicts

Key words: Medical thoracoscopy, pleural effusion, removal drainage

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