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## ERRORS IN THE DIAGNOSIS OF A GIANT CHEST TUMOR

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**Introduction:** Any thoracic tumor requires a precise histological diagnosis in order to get an appropriate therapeutic response.

**Materials and Methods:** We present the case of a 22-year-old female, with a history of spinal scoliosis surgically treated in 2009, diagnosed in another unit with a loculated right pleural effusion after an imaging examination (giant opacity in the right upper hemithorax). It was decided to perform a pleuro-pulmonary decortication. Intraoperatively a giant tumor was identified and a diagnosis of unresectable lung cancer was made.

Multiple biopsies were collected and the patient was referred to the territorial oncology service. The histopathological diagnosis was intrathoracic fibromatosis

– a surprise for the operating team which however contraindicated surgical reintervention.

The patient was admitted to our clinic. We decided to perform a second operation. Intraoperatively a gigantic chest wall tumor was found, without involvement of the lung. We performed chest wall resection of the posterior costal arches 2 and 3, parietal reconstruction - spider-web and polypropylene mesh and a Williams pleuropulmonary decortication.

**Results:** The final histopathological diagnosis was desmoid tumor. The postoperative evolution was very good – without local recurrence for 30 months and counting.

**Conclusions:** Not every giant tumor is a cancer or without surgical solution.

## HOW TRIVIAL IS THE DRAINAGE OF THE PLEURAL SPACE?

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Pleural drainage is a frequently used technique, usually performed outside the thoracic surgery units. We present a series of cases in which this apparently trivial technique led to more or less severe complications; the cases were primary admitted or referred to us from other units between 2000-2014. Most of the cases involved a malposition of the drain - placing into the lung parenchyma or outside the pleural lesion with inefficient drainage; less often, we have encountered drains introduced incompletely or in the chest wall. We had no massive bleeding through damage of the heart and great vessels but we had cases of arrhythmia through compression of the heart. Some of the cases with inefficient

drainage have required eventually a thoracotomy for the repair of the lesion. Another important aspect is related to the postoperative care where apparently minor gestures (positioning of the patient, fitting of the drainage system etc.) can make the drain not functional with the development of a hypertensive pneumothorax. Although it is considered a trivial technique, the drainage of the pleural space involves a great responsibility, with the possibility of severe and even life-endangering complications. In case of an unfavourable evolution after tube-thoracostomy it is necessary an adequate investigation of the patient (especially CT) and immediate referral to a specialized thoracic surgeon.

## AIR LEAKS FOLLOWING PULMONARY RESECTIONS

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**Introduction:** Prolonged air leak is the most common complication after partial lung resection and the most important determinant of the hospital stay duration for patients postoperatively.

**Materials and Methods:** We retrospectively analyzed data regarding the patients in our clinic from April 2012 to April 2014, in order to determine the risk factors involved in prolonged air leaks development. We analyzed: smoker/non-smoker status, pulmonary function tests, patients' demographic data, the main pulmonary disease, type of pulmonary resection, presence of pulmonary emphysema.

**Results:** A number of cases with air leaks lasting more than 7 days postoperatively were present during the study. The risk factors for developing an air leak included the presence of lung emphysema, smoking patients and malnutrition status. Prolonged air leaks were associated with increased length of hospital stay, nosocomial infections, intensive care unit readmission and hospital mortality.

**Conclusion:** Air leaks after pulmonary resections require meticulous surgical technique, especially in patient with higher risk factors.

# RIGHT TRANSPHRENIC APPROACH OF A LEFT HEPATIC LOBE HYDATID CYST ASSOCIATED WITH RIGHT PULMONARY HYDATID CYST – REPORT OF 2 CASES

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**Introduction:** The double location hydatid cyst (lung and liver) represents a challenge for the best surgical approach, especially when the aim is minimizing the operator stress by simultaneously solving both locations.

**Materials and Methods:** We present 2 cases of hydatid cysts with double location (right lung and left hepatic lobe) solved within the same surgical intervention through right thoracotomy and right phrenotomy.

**Results:** While there is a general perception that the

approach of the left hepatic lobe hydatid cysts through the right phrenotomy is difficult or impossible, we were able to safely evacuate and treat the remaining cyst cavity with a satisfactory operator comfort. Both cases had a favorable outcome.

**Conclusions:** The right transphrenic approach of the left hepatic lobe hydatid cysts in the double location hydatid disease (right lung and left lobe of the liver) is feasible and safe, allowing simultaneous treatment of both locations and avoiding laparotomy.

# BRONCHOBILIARY FISTULA - THE LAW OF SERIES

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Bronchobiliary fistula (BBF) is defined as an abnormal communication between the biliary tree and the bronchial tract. It is a rare complication that may appear in the natural history of liver hydatid disease or after its surgical treatment, trauma, congenital malformation, tumor, biliary lithiasis, hepatic abscess. The first case of BBF was described by Peacock in 1850 in a patient with a hydatid cyst.

We present two cases of BBF, at a 74-year-old woman and another in a 35-year-old woman. The most prominent sign is bilioptysis or the presence of bile in the sputum. Other symptoms and signs are cough, fatigue and dyspnea. The diagnosis was set by echosonography, chest X-ray finding, CT scan, fibrobronchoscopy.

In the first case, we performed thoracotomy, with pleurorectomy, middle lobectomy, frenotomy, cystectomy and pericystectomy. In the second case, we performed lower right lobectomy, frenotomy, cystectomy and pericystectomy, followed one month later by laparotomy to resolve another liver cysts. The postoperative period and control chest X-ray and echosonography were normal.

The surgical treatment has the following goals: to treat the liver cyst, secure free biliary drainage, perform hepatodiaphragmatic disconnection, solve intrathoracic lesion and restore the diaphragm.

In any case, a surgery still remains the treatment of choice in cases of bronchobiliary fistula.

# IT'S EASY TO MISS SOMETHING YOU ARE NOT LOOKING FOR: MEDIASTINAL TUMOR VERSUS DOUBLE INFERIOR VENA CAVA

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**Introduction:** We must always be wary of the mirage of the apparent lesion.

**Materials and Methods:** A 52-year-old woman with a history of right mammary carcinoma, for which she had a mastectomy in 2011 and adjuvant chemotherapy, was referred to our clinic after being diagnosed at a follow-up CT scan with a mediastinal tumor.

The patient had no symptoms. A review of a CT scan from 2011 revealed the presence of the mediastinal mass (unnoticed at that time), with the same features as those found on the new CT scan, which made us suspicious enough to investigate more closely. A more thor-

ough examination suggested the presence of congenital anomaly - a double inferior vena cava.

**Results:** A new CT scan with the contrast substance injected in the inferior vena cava system (the left foot) revealed a left vena cava with azygos continuation (which gave the pseudotumoral image), in which the left renal vein drains and the right vena cava in normal position in which the right renal vein drains. Double inferior vena cava is a rare congenital anomaly with an incidence of 0.2-3% of the embryonic venous system.

**Conclusions:** By recognizing this rare venous anomaly, a serious diagnostic and surgical error was avoided.

## LATE-ONSET RELAPSED HYPERTENSIVE HEMOTHORAX AFTER LEFT PNEUMONECTOMY

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**Introduction:** Lung cancer is an extremely serious disease, in most cases the onset of symptoms comes in late stages of the disease. Local and distant tumor development limits the surgical indication, many times the surgical act being a heroic one. Out of all pulmonary resections pneumonectomies are real challenges as possible postoperative complications can be life-threatening.

**Materials and Methods:** We present the case of a 66 year-old female patient at the time of surgery, diagnosed with locally advanced adenocarcinoma of the left lung (lower lobe tumor invading the upper lobe), who sustained left pneumonectomy with mediastinal lymphadenectomy in March 2012. Immediate postoperative evolution was favorable - gradual reduction of the residual cavity, with left shift of the mediastinum - basically a normal post-pneumonectomy course.

**Results:** Upon imagistic control at one year postoperatively the following was observed: the residual cavity had increased in size under the pressure of a fluid which instead of diminishing in quantity was present in a significantly higher volume than on previous postoperative examinations. The general consensus was that we are dealing with pleural metastases which were producing excess pleural fluid. The evolution of the patient and subsequent surgical interventions have demonstrated that the first impression is not always the truth.

**Conclusion:** There are cases, like the one presented, which seem without therapeutic solution. On careful analysis, doubled by perseverance, these cases benefit from spectacular results which break down grim hypotheses previously formed. Associated pathology can create in these cases an unbalance of the organism, which will negatively influence local postoperative evolution.

## BRONCHOANASTOMOTIC AND BRONCHOPLASTIC RESECTIONS IN PULMONARY MALIGNANCY RETROSPECTIVE STUDY 2000 - 2009

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**Introduction:** Bronchial resections are surgical procedures in which bronchial continuity is interrupted, followed by reconstruction of resected ends through termino-terminal anastomosis or various forms of plastic procedures. The purpose of these interventions is to preserve functional lung parenchyma. These procedures are indicated in tumors with central location as an alternative to pneumonectomies, serving to preserve maximum functional lung parenchyma.

**Materials and Methods:** We considered bronchoanastomotic and bronchoplastic procedures performed in our clinic over the period 2000-2009, for malignancy. There were 52 bronchoanastomotic resections and 9 bronchoplastic resections of which we analyzed 40 bronchoanastomotic resections and 4 bronchoplastic resections (44 cases) +/- associated resection. We excluded cases with non-malignant pathology or those with incomplete data at the beginning of the study.

**Results:** It was calculated the importance of main factors involved in relation with survival. We considered the type of surgery performed, histological type, TNM stage, and characteristics of the study group (age, sex).

We found statistically significant correlations between survival and histopathology of malignancy with a better survival for lung carcinoids, especially for typical carcinoid tumors. TNM stage did not significantly influence survival, but N2 nodal involvement, according to the statistics, shows a poor prognosis.

Age is another statistical significant factor correlated with postoperative life expectancy, patients over 65 years old having a worse postoperative survival.

**Conclusions:** In the corresponding lung malignant pathology, bronchoanastomotic and bronchoplastic resections are indicated, but one must take into account the patient's age proposed for surgery, the histopathologic type and N2 nodal involvement



## LATE COMPLICATIONS AFTER A COLIC REPLACEMENT OF THE ESOPHAGUS

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Long term complications after colic replacement of the esophagus are well known and their management is known as difficult due to multiple associated comorbidities; we present the case of a 26-year-old patient with multiple late complications after a colo-esophago-

plasty for lye ingestion during childhood. The patient finally died despite all the efforts of treatment during a prolonged hospitalization. We will try to analyze the key moments on patient's evolution and discuss other options possible in this case.

## BRONCHIAL STENOSIS – A LATE TB COMPLICATION CASE REPORT

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**Introduction:** Tuberculosis is an old disease which continues to be an important health problem in most developing countries. According to the defenses of the host and virulence of the organism tuberculosis can occur in the lungs or extrapulmonary organs. In pulmonary tuberculosis can occur a variety of complications: parenchymal, airway, vascular and pleural lesions.

**Materials and Methods:** A 41-year-old female presented with wheezing and an 1-year progressively increase dyspnea. The patient was diagnosed with TB at age 15 and was treated under close supervision for 6 months. CT scan showed an involvement of the left main bronchus with concentric narrowing of the lumen and uniform thickening of the wall. The patient underwent segmental resection of the left main bronchus with

termino-terminal anastomosis.

**Results:** Bronchoscopy in the operating room showed line spur tracheal broncho-bronchial anastomosis performed at the left slope, lumen of the left upper bronchus blocked with purulent plug. Lower lobar bronchus and the distal segmentation are free. Bronchial toilet is practiced. Favorable postoperative evolution with suppression drainage tube 4 days after surgery and the patient discharged 7 days postoperatively.

**Conclusions:** Despite adequate anti-tuberculosis treatment, endobronchial tuberculosis can result in major airway obstruction from stenosis. Significant bronchial stenosis of major bronchi is rare. Studies have found that left main bronchus is the common site of stenosis and predominance in the female sex.

## MANAGEMENT OF POSTOPERATIVE BRONCHIAL STUMP FISTULA AFTER LOWER RIGHT LOBECTOMY CASE REPORT

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**Objective:** The bronchial stump fistula is the most feared postoperative complication and its successful management remains a challenge for the thoracic surgeons. We present the case of a patient operated on for lung cancer which developed fistula of the bronchial stump after lower right lobectomy and required adequate treatment.

**Patient and Methods:** The patient underwent lower right lobectomy with lymphadenectomy in November 2013 for NSCLC. After an uneventful postoperative recovery, the patient was readmitted three weeks after his discharge for productive cough, fever 38°C and thoracic pain. Bronchoscopy discovered a 3-mm fistula of the bronchial stump, which was also showing on the CT scan. A chest drain was inserted in order to wash the cavity with a mixture of iodine and serum, and broncho-

scopic treatment was initiated, but stopped after only three sessions due to the lack of progress. Surgical treatment was opted for and instead of suturing the fistula, the orifice was covered with a flap of *latissimus dorsi*.

**Results:** The patient did not present postoperative air loss and the chest drain was kept in place for five days. Postoperative bronchoscopic examination at 4 weeks showed a fistula present but without serum or air loss during instillation, respectively insufflations. At three months the fistula was completely closed.

**Conclusions:** Initially, if the bronchial stump fistula measures less than 5 mm and there is no evidence of empyema, bronchoscopic treatment can be attempted. Still, if progress is not recorded after three sessions of bronchoscopic treatment, surgery remains the best option for the patient.

# ADENOCARCINOMA OF THE LUNG WITH A RAPID EVOLUTION – CASE PRESENTATION

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**Introduction:** Pulmonary adenocarcinoma is the most frequent histological type of NSCLC. 80% of all lung cancers are non-small cell cancers, and of these, about 50% are adenocarcinomas. Adenocarcinoma of the lung begins in the outer parts of the lung, and can be present for a long time before it is diagnosed. It is most commonly seen in women and often in non-smokers. For those diagnosed in the early stages of the disease, the prognosis is good.

**Case presentation:** A 44-year-old male patient, referred to a pneumology department for acute respiratory symptomatology (thoracic pain, dyspnea, reduced hemoptysis) developed after a 2-month leg pain. Clinical and laboratory examination diagnosed PTE. CT scan performed also identifies pulmonary nodule in the middle lobe. Fibrobronchoscopy reveals congestion, swelling

and possible infiltration of the RULB and IB. The patient is referred to the thoracic surgery department where surgery is decided. An upper bilobe sleeve resection is performed. Postoperative evolution is slowly favorable with the persistence of bronchial fistula. Chemotherapy is initiated 3 weeks later. One month after starting chemotherapy the patient's condition worsens. The CT scan reveals left pleural effusion with pleural and liver metastases. Subsequently evolution is rapid and the patient dies 3 months later.

**Conclusions:** In this case the adenocarcinoma is diagnosed after a PTE episode. Although initial pulmonary lesions are minimal, the unfavorable postoperative evolution and minimal response to cytostatic therapy led to rapid exitus.

# ASSOCIATION OF SURGICAL TECHNIQUES FOR THE TREATMENT OF POSTPNEUMONECTOMY EMPYEMA CASE REPORT

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We present the case of a 49-year-old patient with a left pneumonectomy performed 4 years before for suppurative destroyed lung. When admitted, the only complaints the patient had were related with minimal suppurative episodes at the thoracotomy level, started about 6 months after the lung resection. These episodes were short and minor, with no general impact on the everyday life of the patient.

We supposed we are dealing with a suture granuloma, and we decided a wound debridement under general anesthesia, as the patient already had two minor unsuccessful procedures under local anesthesia. During the

surgery a post-pneumonectomy empyema was confirmed and we took the decision to perform a small open window thoracostomy (one resected rib).

Further discussing with the patient, we proposed him a fast track Weder/Grotzki procedure combined with a *latissimus dorsi* myoplasty to obliterate the post-pneumonectomy cavity. The procedure was performed as planned and the patient was discharged the 8<sup>th</sup> postoperative day (after the last procedure). Associating two treatment methods for the post-pneumonectomy empyema was successful with a very fast reintegration of the patient in normal life.

# LASER RESECTION OF MULTIPLE PULMONARY METASTASIS

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Since October 2013, I started practicing current extirpation of the multiple lung metastases by laser procedure. During October to August 2014, I practiced 58 procedures on a number of 52 patients (30 men and 20 women), at a total of 6 patients practicing the successive bilateral extirpation. On average they removed 33 metastasis/ surgery, the number ranging from 1-252 metastases. The pulmonary metastasis I have often been left at the colon (12). Postoperative pleural drainage was

double in 38 cases while maintaining its average four days, and unique in 20 cases, which is maintained 48 hours. Postoperative complication was pleural empyema (1), subcutaneous emphysema (2), pleurisy (1) and a death in 10 days in acute cardiorespiratory failure. All patients were referred for oncology services for specific treatment of the underlying disease. After surgical procedures checks every three months revealed no recurrences or late complications.

# SURGERY OF THE TRACHEA AND THE BRONCHUS

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**Introduction:** Despite the modern conservatory treatment of the trachea affection, the resection remains the “gold standard” procedure of every experienced surgeon giving very good results.

**Materials and Methods:** This multicentric study was made by using data base of the archives of the Surgery Clinic of the U.M.F. Târgu-Mureș, 4<sup>th</sup> year between the period of 1992-2014, Anatomic-Pathology Clinic U.M.F. Târgu-Mureș 2008-2014 and the Clinic of Thoracic Surgery of the “Marius Nasta” National Institute of Pneumology Bucharest 2001-2012. The study group included 162 patients with different kind of affection of the trachea and bronchus, whose trachea and bronchus had been resected, pneumectomy with carinal half resection and 96 patients from the Pathology Clinic archive, where, at the post-mortem were described by IOT different type of lesions of the trachea or prolonged tracheotomy. For the data analysis I used the following statistical tests: median, media, sensibility, predictive value, correlation test Pearson, correlation test Spearman, Kruskal-Wallis test, Dunn's comparison test and the Mann Whitney test. The results had been presented through graphics and tables. Tracheal lesions, in the case of the gathered of the files from necroscopy had been divided into 4 grades depending on the macroscopical description of the lesion, as follows:

Grade I - superficial lesion, small ulceration, insignificant;

Grade II - ulcerative, extended lesions with or without the involvement of the cartilaginous rings, fibrin deposits;

Grade III - lesions of the cartilaginous rings with dilatation of the tracheal lumen involving the tracheal wall;

Grade IV - lesions of the cartilaginous rings with significant dilatation, lack of continuity of the tracheal wall.

**Results:** Using the Pearson correlative test, in the cases of the operated patients, and the Spearman test for the patients who belonged to the data base of the pathological archive, it resulted that in both cases there was a significant correlation ( $p < 0.00001$ ) between the intubation time and severity, and the length of the tracheal lesion. The confidence interval is 95%.

By using the values of the glycemia, hematocrit, hemoglobine and the length of the resected segment, we tried to identify the risk factors of the post surgery complications. We found significant correlation from the statistical point of view between the low values of the hemoglobin, hyperglycemia, and appearance of the post surgery complications.

For the patients belonging to the data base of the pathology's archives, I used the Mann Whitney test, I compared the group of patients with the prolonged IOT with those who had tracheostomy and I found that in the case of the patients with tracheostomy the lesions appeared after a longer period (approximately 27 days), compared to those with IOT (approximately 5.5 days),  $p = 0.0003$  minimal value = 1, maximal value = 37 for the patients with IOT; minimal value = 10, maximal value = 47 for the patients with tracheostomy.

## Conclusions

The prolonged oro-tracheal intubation needs to be avoided also in the case of patients with critical health condition who previously requires mechanical ventilation (above 7 days) and should be replaced as fast as possible with tracheostomy. Diabetes and conditions due to anemia represent a risk factor in the appearance of post surgery complications like anastomotic insufficiency and restenosis.

# SKIP METASTASIS – INFLUENCE ON SURVIVAL IN LUNG CANCER

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**Introduction.** Incidence of skip metastasis according to the literature is between 7 and 42.3%. In most studies long-term survival is better in N2-skip patients than survival in N2 non-skip patients.

**Materials and Methods.** Between January 2008 and December 2011 we performed 326 lung resections for lung cancer (pathologically confirmed) with lymphodissection. In 11 cases skip metastases were identified (3.37%), 6 on the right side (54.54%); 5 of 11 were multi-station (45.45%).

**Results.** 5-year-survival is 13.63% for N2 skip patients. Skip metastasis have negative impact on sur-

vival (negative correlation,  $p < 0.0001$ ). Survival of patients with skip N2 is comparable with those with N1 metastasis ( $p = 0.0285$ , no statistical significance). Also, in our study, survival of patients with skip N2 is similar with those of N1+N2 patients ( $p = 0.9336$ , no statistical significance). The low percent of skip metastasis could be due to different approaches on lymph nodes or inhomogeneous nomenclature regarding nodal stations.

**Conclusions.** Identification of skip metastasis requires lymph node dissection (mediastinal, hilar and intrapulmonary) - nodal sampling (even if systematic) may be insufficient.

## TRACHEAL TUMOR RESECTION WITH ANASTOMOSIS BETWEEN THE CRICOID AND TENTH TRACHEAL CARTILAGE

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**Objective:** Malignant tracheal tumors are rare in clinical practice, with nonspecific signs and symptom. In literature the first place is held by secondary tracheal malignant tumors of lung cancer.

**Patient and Methods:** We will present the case of a patient aged 41 who was diagnosed with carcinoma of the trachea, tracheal biopsy. The tumor has been described as bronchoscopy with the onset of the second cartilage and is continued to the tenth level.

**Results:** Tracheal stenosis resection was performed over a length of 5 cm, with anastomosis between the cricoid and tracheal cartilage tenth. Postoperatively there were no complications.

**Conclusions:** Although 10 were resected tracheal cartilage, the patient's general condition is good and videobronchoscopic examination at 30 days postoperatively, stands keeping anastomosis, no areas of edema or local recurrence.

## LATE COMPLICATIONS OF EXTRAPERIOSTEAL PLOMBAGE IN A TB-PATIENT – CASE REPORT

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**Introduction:** Before antibiotic era, the common method used in pulmonary tuberculosis management was collapse therapy based on extraperiosteal plombage using acrylic balls, followed by many delayed postoperative complications.

**Materials and Methods:** A 62-year-old male patient with multiple tuberculosis episodes, with treatment failure, who underwent in 2012 right pulmonary collapse therapy using extraperiosteal plombage with balls blocked with a Prolene net, returns on July 2014 in our clinic accusing chest pain, hemoptysis, weight-loss and nocturnal hydrosis, with BK negative in sputum result, with a significant radiological improvement left lung over right, whose latest CT-scan showed multiple right lung cavitary images, some of them presenting air-fluid levels. Surgery was therefore mandatory to prevent infection spreading.

**Results:** Although in our case a Prolene net was applied for blocking and isolating the plombage material from causing erosions on the surrounding tissues, the isolation net

didn't prevent erosions between the plombage balls themselves. The breached plombage balls presented foreign material inside, with microscopic results showing presence of *Aspergillus*. The initial postoperative care was encumbered by air leakage and absence of lung expansion, with a possible accumulation of clotted blood, which after effective aspiration was evacuated on the third day postoperative and with an postoperative infection with *Pseudomonas aeruginosa*. The postoperative CT showed a single drained cavity, with minimal bilateral pleurisy. The pleural cavity drain was suppressed on day 16 postoperative and the patient was discharged on day 22 postoperative.

**Conclusions:** Prolonged collapse therapy of pulmonary tuberculosis can result in delayed complications years after the original intervention. Specific forthwith antibiotic treatment is imperative in postoperative care. Postoperative associated infections can occur, particularly in susceptible patients hospitalized for a long time. New, less intrusive materials exist in extraperiosteal plombage.

## "24-YEAR-OLD THYMOMA... AT LEAST"

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**Introduction:** Benign thymomas are regular and relatively friendly anterior mediastinal tumors for thoracic surgeons. Then, why I chose to present one? Because of its "age" and his particular presentation.

**Case report:** 68-year-old male, presented in June 2014 with left giant thoracic tumor. The patient had multiple presentations in the past (first one recorded in 1990) for the same reason. Surgical treatment was recommended each time but patient refused constantly. This time, initially refused, but

after 2 weeks he came voluntarily because of the symptoms: "chest pressure" and dyspnea. Left postero-lateral thoracotomy was performed and a giant anterior mediastinal tumor was removed (1350 grams). Histology was Tymoma AB

**Discussion:** We found this case particular because of its long evolution, without signs of malignant transformation and because of its aspect; the tumor was completely into the left thoracic cavity, only intraoperatively we presumed that it was a tumor from anterior mediastinum.



# TRIPLE ONCOLOGICAL LESIONS METACHRONOUS

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**Introduction:** The unwonted combination of three metachronous cancerous lesions is rarely quoted in special literature.

**Materials and Methods:** The authors present the case of a 61-year-old woman who had surgeries for malignant melanoma of the anterior abdominal wall in 1996, with adjuvant chemotherapy, and right breast carcinoma in 1999 (total mastectomy) and axillary clearance in 1999 (histopathological and immunohistochemistry examinations: metastasis of melanoma) with adjuvant chemotherapy also; the patient was admitted for exertional dyspnea, chest pain and cough. Chest radiography shows two homogeneous opacities: one of 1.5 cm located in the left lung field and the other one of 1 cm in the right lung field.

Native chest CT reveals a 16 mm spiky nodule in the left upper lobe, bilateral pulmonary nodules with sizes between 3-15 mm and lower paratracheal, precarinal and left hilar

lymph nodes. The fibrobronchoscopy highlighted aspects of chronic bronchitis. From the study of bronchial aspirate we note: BAAR negative, negative mycology, and positive results for *Klebsiella pneumoniae* sensitive to Ceftriaxone, Imipenem, Ofloxacin, Ciprofloxacin.

**Results:** Intraoperative discover a tumor located in the left upper lobe with axial diameter 3 cm, hard, with the retraction of visceral pleura and intense fibrosis around. It is performed left upper lobe non-anatomical resection and hilar lymphadenectomy. Histopathological examination: primary lung adenocarcinoma also confirmed by immunohistochemistry. The postoperative evolution was favorable and the patient is following the adjuvant chemotherapy.

**Conclusions:** Particularity of the case is the combination of three metachronous cancerous lesions. It should be emphasized the value of the obtaining the histopathological diagnosis in case of lung lesions in a patient with a history of cancer.

# THE ROLE OF CHEMICAL AGENTS IN THE TREATMENT OF MALIGNANT PLEURAL EFFUSIONS

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**Introduction:** Malignant pleural effusions (MPEs) represent a common complication which can occur in any neoplastic disease.

**Material and Methods:** During October 2012 - August 2014 we performed a prospective study aimed to establish the adequate treatment for malignant pleural effusions. 85 patients were included in this study, diagnosed and treated in the Thoracic Surgery Department of the Central Military Emergency University Hospital.

**Results:** 46 patients underwent chemical pleurodesis with betadine (through thorascopic surgery - 30 patients - or through a chest drainage tube - 16 patients), while for 39 patients talcum powder was chosen as the agent for pleurodesis (through thorascopic surgery -

28 patients - or through a chest drainage tube - 11 patients with major surgical risk). The most frequent cancers with secondary MPEs were lung cancers (50 patients). The efficiency of the two methods was the same. The most used chemical pleurodesis procedure was the thorascopic surgery (58 patients). The most used agent for pleurodesis was betadine (30 patients).

**Conclusions:** Chemical pleurodesis with betadine is a safe procedure, which can be used intraoperative (thorascopic surgery) or through a chest drainage tube (for patients with major surgical risk). Chemical pleurodesis with betadine plays an important role in addressing MPEs because of its high therapeutic efficiency and lower complications rate when compared to other agents (talcum powder).

# PERCUTANEOUS MACROBIOPSIES OF THORACIC TUMORS - OUR EXPERIENCE

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**Introduction:** In our current practice we are often faced with the necessity to obtain a correct histopathological diagnosis in patients with thoracic tumors (of the lung, mediastinum or chest wall), especially in inoperable cases who would benefit from chemotherapy or radiotherapy.

**Material and Methods:** We present our experience of over 40 biopsies performed over 2.5 years (from February 2012) with the manual macrobiopsy system - Spirotome™. Fine-needle biopsy requires highly experienced histopathologists - cytological samples being difficult to assess. Core biopsies with larger needles pro-

vide small tissue samples; some authors even recommend the presence of the pathologist when the biopsy is made to assess the quality of extracted fragments. The Spirotome™ system enables collection of large tissular fragments that allow multiple sections and more laboratory testing, such as immunohistochemistry and analysis of tumour-markers.

**Results:** The biopsies were performed under CT guidance in 64% of cases, 11% were ultrasound guided and in 25% no guidance was necessary for subcutaneous,

palpable or giant tumors. All biopsies were performed under local anesthesia. The technique is relatively easy, accurate and safe. In our series we encountered no major complications, we had two cases of pneumothorax that required pleural drainage.

**Conclusions:** Percutaneous biopsy with the manual macrobiopsy system - Spirotome™ is a feasible, safe and accurate technique for the minimally invasive diagnosis of thoracic tumors, a welcome addition to the armamentarium of the thoracic surgeon.

## SOLITARY PULMONARY NODULES IN PATIENTS WITH A HISTORY OF UROGENITAL NEOPLASIA

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**Introduction:** The lung is a frequent target of secondary determinations from urogenital cancers, by being a filter in the path of hematogenous dissemination. Metastases appear as a solitary or multiple pulmonary nodules. The existence of a solitary pulmonary nodule may represent a synchronous or metachronous pulmonary lesion, without a secondary determination.

**Case presentation:** The authors present three cases of patients with a history of operated urogenital malignancies, which were subsequently diagnosed with solitary pulmonary nodule. Without the evidence of a positive histopathologic result, the lesions were considered at the time to be secondary determinations. Due to size increase after specific chemotherapy, the patients were referred to the Thoracic Surgery Clinic for evaluation. Indication for surgery was resection and the histopathological findings invalidated urogenital starting

point hypothesis.

**Discussion:** The three patients were known for cervical cancer, right papillary carcinoma and bladder cancer. The detection of the solitary lung nodule was done after about 12, 24 and respectively 60 months of disease-free interval from initial diagnosis. Postoperative histopathological findings were hamartocondroma, tuberculoma and respectively papillary adenocarcinoma of the lung. For the benign lesions atypical resection and adjusted segmental resection were practiced and for primary lung cancer - radical lobectomy.

**Conclusions:** In some cases, solitary pulmonary nodules in patients with known malignancies are not secondary determinations. Every solitary pulmonary nodule, regardless of the patient's personal history, even neoplasia, should receive histopathological diagnosis for the appropriate therapeutic approach.

## SHORT-TERM RESULTS FOR BRONCHIAL SLEEVE LOBECTOMY IN A ROMANIAN CENTER

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**Objective:** Bronchial sleeve lobectomy is a complex procedure that has gradually been introduced as a standard resection technique for lung cancer but can also be used for other pathological entities. We present the results of sleeve lobectomy in 81 patients operated on during the time frame.

**Patients and Methods:** Our research included 81 patients undergoing sleeve lobectomy during the period from November 2008 to December 2012. Data of preoperative work up, operative procedures, perioperative mortality and morbidity were collected. Patients were followed-up and any anastomotic complications, tumor recurrence or mortality were also recorded.

**Results:** Procedures included 81 sleeve lobectomies in which resection was complete in all patients. Histopathologic examination revealed that there were 62

(77%) Non Small Cell Lung Cancer (NSCLC), 2 carcinoid tumors and 17 (21%) other pathological entities (hamartoma, atypical carcinoid tumors, chronic pneumonia, fibrosarcoma). There were only two (2.46%) perioperative deaths; median length of hospital stay was 9 days. Postoperative complication rate was 33%. These complications were wound infection, retention of secretions with atelectasis, prolonged air leak, transient ischemic attacks and bronchopleural fistula. The mean follow-up duration was 6 months; there was no local recurrence or anastomotic stenosis.

**Conclusions:** Sleeve lobectomy can be performed with low mortality and morbidity rates. These procedures should be performed as an alternative to pneumonectomy provided the surgical oncologic principles for the resection of lung cancer are abided.

# PSEUDOPHEOCHROMOCYTOMA - MEDIASTINAL CYST MIMICKING FUNCTIONAL PARAGANGLIOMA

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Mediastinal pheochromocytoma, also known as functional paraganglioma, occurs in the chest for less than 2% of all pheochromocytomas.

We present the case of a 34-year-old female patient admitted with a high posterior mediastinal tumor and typical symptoms of catecholamine excess; blood and urine samples also showed high concentration of metanephrines. The CT scan showed a 2-cm tumor located in the posterior mediastinum, very high. No other tumors were detected by the CT scan. It should be mentioned that the patient had anisocoria, suggesting stellate ganglion involvement.

We decided for a thoroscopic approach and we were able to completely resect the lesion - the surprise was that, even though we were expecting a solid tumor, we actually encountered a mediastinal cyst, not suitable with the supposed

diagnosis. After completely exploring the region in order to exclude the presence of a solid tumor, we decided to close the patient. Postoperatively, the patient's evolution was perfect, the blood pressure and heart rate became normal, anisocoria disappeared twelve hours postoperatively.

The causes of paroxysmal hypertension in patients in whom pheochromocytoma has been excluded (pseudopheochromocytoma) usually remain unclear. Blood pressure disturbances and symptoms of catecholamine excess in these patients may reflect activation of the sympathetic nervous and adrenal medullary systems. We suppose that these systems were activated by the cyst pressure on the stellate ganglion, supposition sustained by the disappearance of symptoms and serum and urinary metanephrines 2 months after surgery.

# ANTERIOR COMPRESSIVE DERMOID CYST OF THE MEDIASTINUM - CASE PRESENTATION

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**Introduction:** The benign teratoma of the mediastinum represents the most frequent form of germinal tumor. It can either be an epidermoid cyst, a dermoid cyst or a teratoma, depending on its structure and origins in the embryonic cell

**Material and Methods:** We are presenting the case of a 51-year-old man who was diagnosed with an anterior compressive dermoid cyst on the vascular mediastinal structures.

**Clinical case:** The 51-year-old patient was diagnosed based on dyspnea on exertion and former weak thoracic pain. Following the investigations, the diagnosis given was anterior tumor of the mediastinum. After an adequate preopera-

tive preparation, the patient went under general anesthesia and we operated through a left anterolateral thoracotomy. During the procedure we found a relatively well restricted formation which came in contact with the aorta and the body of the pulmonary artery. In order to dissect it and remove it completely, we needed to open the pericardium.

**Histopathology exam:** Dermoid cyst of the mediastinum with formations in all three embryonic cells.

**Conclusion:** Although the complete excision is difficult, and sometimes it involves leaving small part on the mediastinal structures, we opened the pericardium for the complete excision, without having the certainty of the etiology of the formation of the mediastinum.

# COLON INTERPOSITION AFTER TOTAL ESOPHAGECTOMY AND GASTRIC STUMP RESECTION FOR SQUAMOUS ESOPHAGEAL CARCINOMA

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In this paper we report a case of esophageal squamous cell carcinoma located in the lower third, diagnosed in a 63-year-old man, with a history of Pean gastrectomy for duodenal ulcer. Surgery was performed with total eso-gastrectomy, 2 field lymphadenectomy, Ivor-Lewis type approach, and esophagoplasty with colic graft. Stomach use, for esophageal substitute was excluded for technical and oncologic reasons. Esophagoplasty was made with transverse and descending

colic graft, isoperistaltic, with left colic artery used as a feeding source. Restoration of digestive continuity was performed by esophageal-colic intrathoracic anastomosis, Collard type, colon-jejunum in Y loop anastomosis and colon-colon anastomosis. Clinical outcome after surgery was favorable, with discharge on day 14 postoperative.

**Keywords:** esophagoplasty, digestive intrathoracic anastomosis, esophageal cancer.

## PARTICULAR IMAGING ASPECTS OF A MEDIASTINAL TUMOR

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**Introduction:** The mediastinum is the cavity that separates the lungs from the rest of the chest. It contains the heart, esophagus, trachea, thymus, and aorta. Mediastinal tumors are represented by a wide variety of masses arising from these organs.

**Material and Method:** A main pulmonary artery compression with acute right heart failure was discovered in a 27-year-old female operated through median sternotomy 9 months before for a mediastinal osteosarcoma metastasis with femoral origin. We performed an urgent left anterior mediastinotomy with mediastinal tumorectomy under local anesthesia, enhanced with sedation for vascular decompression.

**Results and discussion:** CT scan reconstructions in sagittal and transversal plane reveal the relations of the mediastinal mass, with compression of the main pulmonary artery. Echocardiographic findings associated right atrial and right ventricular failure: right ventricular and atrial enlargements, severe tricuspid regurgitation. The surgical procedure went without any major complications. The patient was discharged ten days after surgery with a satisfactory general condition.

**Conclusions:** We consider this intervention a life-saving procedure by decompressing the pulmonary trunk and the remission of the acute heart failure.

## VATS ROLE IN THE TREATMENT OF POSTOPERATIVE BLEEDING AFTER THORACIC SURGERY

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**Introduction:** The aim of this study was to evaluate the role of video-assisted thoracoscopic surgery (VATS) in the treatment of postoperative bleeding after thoracic surgery.

**Materials and Methods:** We retrospectively analyzed data from our institution on the use of VATS approach in patients requiring reexploration for hemorrhage occurring after open procedures (pneumonectomy or lobectomy).

**Results:** Five surgical re-explorations were performed: 4 after pneumonectomy, 1 after lobectomy. The

interval between the end of the first procedure and re-exploration was 20-36 hours. The source of the bleeding was identified in 4 patients (80%). No deaths occurred. The postoperative course was uneventful for all patients.

**Conclusions:** The VATS approach for postoperative hemothorax requiring surgical re-exploration seems to be safe and effective and guarantees the benefits of minimally invasive surgery: it allows the surgeon to evacuate the hemothorax, to accurately explore the operative field and to achieve adequate hemostasis.

## GIANT CHEST WALL RESECTION – TWO-STEP OPERATION

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*Interdisciplinary collaboration Thoracic Surgery – Plastic Surgery*

We will present the case of a male patient, aged 53, with no pathological history, who is admitted in our clinic for the surgical treatment of a huge chest wall tumor located in the left pectoral region. The patient neglected the tumor for three years, in which time the tumor slowly grows to over 30 cm diameter. At the admittance the patient was in pain and was unable to perform frontal moves with his upper limb.

The surgical intervention was performed in two steps.

First step the resection, which includes the tumor itself, along with the pectoralis minor and pectoralis major muscles, two medial thirds of the left collar bone and the cartilages of the left 5<sup>th</sup> and 6<sup>th</sup> ribs. The reconstruction of the chest wall was made with STRATOS system and polypropylene mesh. The tumor was excised along with the skin, resulting in a major cutaneous defect, which was repaired in the second surgical step by using rectus abdominis and *latissimus dorsi* flaps, and skin grafts.



# IMAGISTIC AND INTRAOPERATIVE PSEUDOTUMORAL ASPECTS OF MEDIASTINAL TUMOR

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**Introduction:** Mediastinal tumors (mediastial adenopathies) are frequently associated with malignancy. Nevertheless, many benign diseases may cause the enlargement of mediastinal lymph nodes.

**Methods:** We present the case of a 62-year-old patient, with type II diabetes mellitus insulin-dependent, with diabetic neuropathy, diabetic nephropathy with chronic dialysis in chronic renal disease, hypertensive cardiopathy, cataracts, chronic hepatitis B, osteoporosis, ischemic stroke (2004), who is admitted in our clinic for chest pains and dyspnea at medium efforts. Investigations revealed infiltrative tumor in visceral compartment 4/5.7/7.36 cm vs. in contact with the left subclavian vein; Medial is in contact with the subclavian artery, left carotid artery and aortic arch; by side around the pulmonary artery trunk, infiltrating the left pulmonary hilum.

**Results:** It was decided the surgery for diagnostic and/or tumor reduction, intraoperative ascertaining visceral mediastinal tumor located above the aortic

arch, infiltrating the left lung hilum; left upper lobe intimately adherent to the tumor. Multiple tumor biopsies are taken.

Histopathology examination: pleural and pulmonary fragments with giant cell epithelioid granulomas without necrosis of the pulmonary interstitium, rare asteroid bodies present. Histopathological features consistent with sarcoidosis.

**Conclusions:** This case draws the attention upon a rare, yet possible etiology, of mediastinal tumor formations.

It was noticed that the female patient has been suffering of a neoplastic disease for a long time. Due to the associated diseases: insulin-dependent diabetes mellitus with major complications: diabetic neuropathy, diabetic nephropathy with chronic dialysis which made her difficult to benefit from surgery for a biopsy to elucidate the histopathological diagnosis. For the same reason, it became difficult to benefit from medical treatment.

# VIDEOTHORACOSCOPIC IMPLANTATION OF AN EPICARDIAL PROBE FOR RESYNCHRONIZATION SYSTEM

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**Introduction:** Every year, an estimated 17 million people globally die of cardiovascular diseases, which unfortunately remain a leading cause of mortality worldwide despite advances in prevention and management. Cardiac resynchronization therapy (CRT) is a relatively new therapy for patients with symptomatic heart failure resulting from systolic dysfunction. CRT is achieved by simultaneously pacing both the left and right ventricles. Biventricular pacing resynchronizes the timing of global left ventricular depolarization and improves mechanical contractility and mitral regurgitation.

**Materials and Methods:** We present the case of a 74-year-old patient known with chronic cardiac failure class IV NYHA, dilated ischemic cardiomyopathy, atrial fibrillation with therapeutically controlled heart rate, complete block of the left branch and severe ischemic mitral insufficiency. The patient presented criteria for cardiac resynchronization and that was the chosen method of treatment. Unfortunately, the second stimulation probe couldn't be implanted at the level of coro-

nary sinus, thus a thoracoscopic implantation of an epicardial electrode was chosen.

**Results:** The left subclavian vein was used in order to insert the passive ventricular stimulating probe at the level of the apex of the right ventricle. The second stimulation probe had to be inserted by a video-thoracoscopic approach into the epicardium. Both probes were connected to the left subclavicular implanted generator and the resynchronization was started immediately after implantation, on the operating table. The postoperative evolution was favorable and the cardiac condition of the patient improved gradually. Unfortunately, the patient died 2 years after operation due to a severe renal failure.

**Conclusions:** Implanting an epicardial electrode for resynchronization system through video-thoracoscopy is a rare practiced procedure, with a very good outcome and can expand the field of thoracoscopically approachable diseases. This type of minimal invasive implantation represents an alternative when the endovascular implantation fails.

# THE ROLE OF BRONCHOSCOPY FOR THE THORACIC SURGERY COMPLICATIONS

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**Objective:** This paper presents our experience in applying bronchoscopy after the thoracic interventions, due to immediate complications, or early complications we were confronted with.

**Material and Methods:** We analyzed 112 procedures, within a 10-year period, to a number of 73 patients, the vast majority having lung cancer. We applied 97% immediately postoperative and 3% within the ICU.

**Results:** The immediate postoperative procedures are presented taking into account the complications. On the first place we treated atelectasis, followed by sudden or

persistent air leaks, endobronchial clot or pneumonia, ARDS, bronchopleural fistula. Bronchial aspiration was the most frequent procedure, followed by clot removal.

The procedures within the ICU were addressed to respiratory failure, tumoral fragments were removed, teeth or clots from either the same lung or the contralateral one. The mortality rate was 4.2% in the context of the current pathology, which we interpret as a good result.

**Conclusions:** The thoracic surgeon with bronchological training, alongside his current duties, can be important. The good results of bronchoscopy encourage us to use it.

# FREE CONTRALATERAL MUSCULO-CUTANEOUS FLAP, A SOLUTION FOR THE TREATMENT OF POSTPNEUMONECTOMY CAVITY

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**Introduction:** Post-pneumonectomy empyema with bronchopleural fistula still remains the most feared long term complication both of the patient and his surgeon.

**Method:** We present the case of a patient admitted to our clinic for destroyed lung after TB, to whom we performed pneumonectomy. The patient developed bronchopleural fistula after 3 months; we performed opened thoracic window. After 6 months the fistula closed, but the remaining cavity was 500 ml in volume. We decided to use a free

musculo-cutaneous flap using contra lateral *latissimus* and *serratus anterior*, with thoracodorsal pedicle.

**Results:** We obtained full recovery, with no postoperative morbidity and good esthetic result.

**Conclusions:** The free musculo-cutaneous flaps can be successfully used for the plompage of the remaining cavity after pneumonectomy, if the ipsilateral muscles are not viable (due to interruption of the pedicle at the posterolateral thoracotomy).

# MIXED THORACIC AND CERVICAL APPROACH TO PREVENT HEMORAGIC COMPLICATIONS FOR GIANT INTRATHORACIC GOITERS

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**Introduction:** Patients diagnosed with giant intra-thoracic goiters pose a series of problems regarding surgical approach, especially the cases with adhesion to the mediastinal portion of the trachea, or abnormal vascularization. We present our experience for this patient category.

**Methods:** We analyzed retrospectively a series of 13 cases with tumors greater than 6 cm that were migrated into the mediastinum on a 2-year period (2012 - 2014). 6 out of 13 cases required total thyroidectomy for tumors with size between 6/8 to 12/9 cm, the rest of the patients having performed lobectomy (5 left and 2 right). We performed partial median sternotomy in 2 cases due to adhesions to the trachea and two mini-thoracotomies (suspicion of invasive metastatic melanoma, abnormal blood supply of the thyroid). The

statistics were performed using Microsoft Excel.

**Results:** Mean age was  $60 \pm 8.079$  years, with a 2:1 male/female ratio. We recorded no mortality, one patient developed laryngeal edema. Mean hospital stay was 6.25 days. Pearson's index between age and size was -0.094. The correlation between age and postoperative days was 0.114.

**Discussions/Conclusions:** Giant intra-thoracic goiters can safely be excised through cervical approach, avoiding prolonged hospital stay and complications, if the tumors present no adhesions to the trachea. For those cases we recommend partial median sternotomy. If there is suspicion of malignancy or invasion or abnormal vascularization from the mediastinum we recommend a diagnostic thoracoscopy to minimize the surgical risk (bleeding) on resection.

## DOUBLE THORACOSCOPIC AND OPEN APPROACH FOR THE RESECTION OF A CHEST WALL TUMOR

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**Introduction:** Tumor pathology of the chest wall is more common nowadays, even in young patients. Chest wall tumors usually requires extended surgery to achieve oncological margins. In some cases the position of the tumoral formation makes it difficult to approach using classic techniques and to achieve oncological margins, thus complementary thoracoscopic approach may be needed.

**Material and Methods:** We present the case of a 16-year-old patient admitted in our clinic after a sport accident. Incidentally the chest X-ray identified a tumoral formation of the left 2<sup>nd</sup> rib. The CT scan revealed that the formation was limited only to the second rib, with osteolysis. We decided to use both thoracoscopic and open approach. We created a port using the 4<sup>th</sup> intercostal space mid axillary line, and visualized the tumor; using the cautery we delimited the resection area.

Using the dissector we established the utility incision site. We then performed a 3-inch incision for the open approach and we started the endoscopic dissection of the tumoral formation. After the dissection was complete, we proceeded with the rib resection using the utility incision and resected the tumor. Chest wall reconstruction was performed using separated interlaced "spider web" stitches. One chest drain was placed.

**Results:** The postoperative outcome was good, with no complications. The resection was within oncologic margins. Hospital stay was 4 days, with one day ICU care, with minimal analgesic treatment.

**Conclusion:** Dual approach was very useful for the resection, the magnification helped us to establish the macroscopic margins for the tumoral formation. The use of endoscopic dissection has the advantage of a minimal resection incision and minimal bleeding.

## TRANSDIAPHRAGMATIC MOBILIZATION OF THE OMENTUM FOR CLOSURE OF THE POST-PNEUMONECTOMY FISTULA

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Bronchial fistula after pneumonectomy is one of the most severe complications in thoracic surgery. One of the solutions is the closure of the bronchial defect by using an omentum flap, which is classically mobilized through laparotomy. The technical artifice presented by us (which was used at the suggestion of a more experienced colleague) involves a phrenotomy,

palpatoric identification of some anatomic structures (liver, falciform ligament and transverse colon), identification of the omentum and its tractioning into the chest. For small defects and in patients with no abdominal adhesions, we found that this technique is perfectly feasible, allowing the avoidance of a laparotomy.

## THORACOMYOPLASTY FOR A MULTIRELAPSED EMPYEMA (2 DECORTICATIONS AND AN OPEN-WINDOW) WITH MULTIPLE BRONCHIAL FISTULAE

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We report a patient with a history of open decortication (overinfected hematoma and left lower lobe pulmonary abscess), followed by an iterative decortication, followed by an Eloesser open-window procedure. The postoperative course was unfavorable, the patient remaining with an open wound with abundant purulent secretions and no tendency for healing after 6 months of local treatment. The first two procedures were performed through an antero-lateral thoracotomy while the open-window was made two intercostal spaces below

the thoracotomies. The obliteration of the cavity was achieved by a thoracomyoplasty – topographic resection of 6 ribs, complete mobilization of the *latissimus dorsi*, partial mobilization of the serratus anterior and the use of the intercostal flaps corresponding to the resected ribs. Intraoperative we found 18 bronchial fistulae which were closed and reinforced using the muscle flaps. The postoperative course was favorable, with per primam wound healing, obliteration of the cavity and discharge after 36 days.

# SURGICAL TREATMENT FOR LUNG METASTASES IN UROGENITAL CANCERS

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**Introduction:** Lung metastases after urogenital tract tumors are a rare etiology of second determinations in the lung. For this reason and due to histological variability conducting detailed studies on significant groups is difficult.

**Material and Methods:** We conducted a retrospective study that included all patients admitted in our clinic between 2008-2013 with secondary lung determinations of urogenital cancer. Were included patients who had followed curative treatment for primary tumor. Data were collected on the origin and histological type of the primary tumor, number of metastases, patient age, disease-free interval.

**Results:** During the period described were operated on 29 patients. Disease-free interval (IDF) average was

58 months (1-195 months). The median survival from diagnosis of metastases was 94 months. 1<sup>st</sup> year survival after metastasectomy was: 100% endometrial carcinoma, 62.5% for cervical cancer, 60% for sarcoma of the uterus, and 85% for renal cell carcinoma. We found statistically significant differences in survival according to: histology, number of metastases and disease-free interval.

**Conclusions:** Surgical treatment of metastases after urogenital tract cancers is associated with high long-term survival, depending on the number of metastases, disease-free interval and histological type. A longer DFI is associated with a better outcome. There seems to be no significant link between patient age and survival after metastasectomy, but this requires further studies on larger groups of patients.

# COMPLEX AERO-DIGESTIVE RESECTIONS FOR ESOPHAGEAL CANCER

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**Introduction:** The malignancies of the aero digestive tract represent a formidable problem both for patients and physicians. Cervical exenterations followed by oesophageal reconstruction may represent an efficient therapeutic option in highly selected cases. The purpose of these interventions is to considerably improve the quality of life in either curative or palliative resections.

**Material and Methods:** We present the surgical therapeutic strategy chosen in 2 cases: one 58-year-old female patient, diagnosed in July 2013 with an epithelial carcinoma of the oesophagus invading the larynx and thyroid; after histological confirmation the patient underwent chemo-radiation treatment then surgical resection and a second female patient, 63 years old, with primitive thyroid malignancy - anaplastic carcinoma with the invasion of the trachea and proximal oesophagus.

**Results:** In both cases we performed a laryngo-pharin-

geal and cervical trachea resection with oesophagectomy, and reconstruction with gastric pull-up and pharyngo-gastric anastomosis. The postoperative results were favourable for the first case, the second patient developed a gastro-pharyngeal anastomotic healing deficiency in the 7<sup>th</sup> day postoperative, later with the instalment of mediastinitis, ARDS and exitus on the 28<sup>th</sup> day postoperative.

**Conclusions:** The radical surgical treatment of these neoplasms is an important step in the multimodality treatment of this pathological setting, offering benefits both for survival and improvement of the quality of life, overtaking the major risks associated with these ample resections, provided that they are being performed in highly specialised units that possess the necessary expertise and logistics needed.

**Keywords:** laryngo-pharyngectomy, oesophageal, reconstruction, anastomosis

# SCOLIOSIS AND PSEUDOTUMORAL CHEST WALL DISTORSION THROUGH ROTATION

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We present the case of a 31-year-old female patient, with a history of a postero-lateral thoracotomy performed during childhood (medical documents not available) who was referred to our unit with the diagnosis of chest wall tumor for biopsy/ resection. At the local examination an obvious distortion of the chest wall was noted. The CT scan showed

a severe scoliosis associated with rotation, the pseudotumoral distortion being the result of the anterior displacement of the chest wall secondary to the rotation of the vertebral column and trunk. The patient follows a conservative treatment (physiotherapy). The case is interesting due to the severity and the imagistic aspect.



# THE SURGICAL TREATMENT OF GIANT INTRATHORACIC BENIGN TUMORS – MUCH ADO FOR NOTHING

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**Introduction:** Giant benign intra-thoracic tumors are very rare. The patient's symptoms are non-specific and the imagistic findings are impressive, though the surgical solution and the postoperative outcome are very simple.

**Methods:** We reviewed retrospectively the charts and operative logs of 17 patients, admitted in our clinic between 2001 and 2014, aged between 16 and 68 years. The diagnostic was based on imagistic study findings (CT scans, MRI and XR). Tumors with sizes under 15 centimeters or malignancy were excluded from our study. Due to the size of the tumors, we used open surgery from the start. We analyzed average with standard deviation for age, postoperative in hospital stay and correlation between the size of the tumors and hospital stay, age and hospital stay, age and tumor size.

**Results:** The mean age of our series was  $42.6 \pm 16.4$  years, with male/female ratio of 0.77. The mean postoperative hospital stay was  $8.5 \pm 2.52$  days and the correlation between tumor size and hospital stay was 0.005. The mean size of the tumors was  $13.31 \pm 5.4$  cm measured on the greatest diameter. Correlation between age and tumor size was 3.319 and between age and hospital stay was 0.032. In all the cases we performed complete resection of the tumoral formations via postero-lateral approach with active suction. With the exception of two cases, one with slow lung re-expansion rate (tumor over 20 cm) and one intercostal bleeding, we recorded no postoperative morbidity.

**Conclusions:** Although the preoperative imagistic aspects of this pathology are very impressive, the technique represents virtually no challenge for the surgeon. ■