FREE PAPER E-POSTER PRESENTATION – ABSTRACT

P1 - Pneumonectomy In Congenital Lobar Emphysema: A Case Report

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<u>Background</u>: Congenital lobar emphysema is a rare congenital disease which caused by anomaly on bronchial cartilage development. Usually, it is limited to a single lobe. It could be treated conservatively or surgically depend on the clinical condition.

<u>Objective</u>: In this case report we would like to discuss the management strategy for congenital lobar emphysema that affected the whole lung in 17 days old baby.

<u>Methods</u>: The patient was admitted to NICU due to respiratory distress. The patient had a difficulty to wean from ventilator. Radiologic examination revealed the whole left hemithorax is filled by multiple bullae which push mediastinal organ contralaterally. Intraoperatively, we found the whole left lung is emphysematous and there is PDA which is not detected preoperatively. Surgeon decided to do pneumonectomy and PDA ligation. After operation, patient recovered on NICU slowly and discharged from hospital 34 days post operation.

<u>Result</u>: our case of congenital lobar emphysema which affect one side of lung is a rare case. Our decision to do pneumonectomy was challenging post operatively.

<u>Conclusion</u>: Multidisciplinary team should be involved in treatment of congenital lobar emphysema. Team should be prepared for prolonged intensive care if decision to do lung resection is chosen.



Figure 1. Left lung of a 17 days old neonate notice both upper and lower lobe were emphysematous.

P2 - Cardiac Tamponade Related Hyponatremia: A Case Series

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<u>Background:</u> Hyponatremia is one of the most common electrolyte imbalances defined as a decrease of serum sodium concentration below 135 mEq/L. Hyponatremia itself is a manifestation of varying diseases and poses its challenge to diagnose and treat the underlying cause. One of the rare causes of hyponatremia is cardiac tamponade, that usually reversible by pericardiocentesis.

<u>Objective:</u> Aim of this study is to present serial case of cardiac tamponade related hyponatremia and to review it by the current literature.

<u>Methods:</u> We present two cases of hyponatremia following pericardial effusion with active malignancy. In the first case, hyponatremia couldn't be corrected by 3% NaCl but had a rapid reversal soon after pericardiocentesis. On the second case, we haven't obtain the electrolite result after pericardiocentesis since the patient had died.

<u>Results</u>: Our cases are consistent with the previous studies and several case reports. To this date, the recent of hyponatremia following pericardial effusion remains unclear. But, many believe this happens due to elevated Antidiuretic Hormone (ADH) serum and the impairment of kidney-free water excretion.

<u>Conclusion</u>: Although diagnosing the cause of hyponatremia is challenging, cardiac tamponade as a root cause of hyponatremia should be one of the differential diagnoses. As this will leads to prompt treatment and in most cases, pericardiocentesis will lead to rapid reversal of hyponatremia.

P3 - Multidisciplinary Management Of Intractable Recurrent Tracheal Stenosis After The Failure Of Primary Repair: A Rare Case Report

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<u>Introduction:</u> Failure of anastomosis after primary tracheal reconstruction for benign disease is uncommon. Treatment of tracheal restenosis involves careful consideration of modifiable surgical factors leading to failure. We presented a case report of multidisciplinary management for intractable restenosis trachea.

<u>Case Report:</u> Male, 44-years old patient complained of worsening shortness of breath and was brought to the emergency department. Patients has known history of respiratory failure due to COVID-19 with prolonged intubation in the intensive care unit. Imaging study showed upper airway obstruction due to tracheal stenosis. Tracheostomy was performed to maintain the airway and tracheal resection with end-to-end anastomosis was performed. One month following the surgery, bronchoscopy evaluation showed granulation tissue on the anastomosis. Re-anastomosis with tissue refreshment and steroid injection was carried out. Patient was discharged and tracheostomy tube was decannulated.

Two months after second surgery, the patient came with the same complain and reinsertion of tracheostomy tube was done. Patient was referred to Persahabatan General Hospital for further investigation. Bronchoscopy evaluation showed a pinpoint opening of proximal trachea (approximately 1,5 cm below the vocal cord). Cryo-ablation followed by balloon dilatation and steroid injection was done. After the procedure, tracheal opening was more than 50% of the lumen with stenosis length of 2,5 cm. Repeated cryo-ablation with balloon dilatation was done 4 months from the previous intervention. Tracheostomy tube was able to be decannulated and no sign and symptoms of airway problem during 3 months follow-up.

<u>Conclusion:</u> Multidisciplinary approach is essential to manage intractable recurrent tracheal stenosis. Due to high surgical morbidity and risk for re-operation, bronchoscopic cryotherapy with balloon dilatation should be considered as a safe alternative for intractable recurrent tracheal stenosis.

P4 - Achalasia Patient Successfully Treated With Transthoracic Approach Of Esophagomyotomy And Belsey Mark IV Fundoplication

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<u>Background:</u> Achalasia is a primary esophageal motility condition defined by and thought to be caused by selective loss of inhibitory neurons in the myenteric esophageal plexus. Achalasia is a rare condition with an annual incidence of 1–1.6 cases per 100,000 people and a frequency of 10 instances per 100,000. Current treatment options include non-surgical and surgical approaches, each with its benefits and drawbacks.

<u>Objective</u>: The purpose of this study was to present a case of achalasia and to emphasize the use of the transthoracic approach as an alternative for abdominal surgical options.

<u>Methods</u>: We report a 23-year-old male who presented with chief complaints of progressive difficulty swallowing food and drinking for about eight years. He was diagnosed with achalasia. In addition, a chest computed tomography (CT) scan and esophagogastroduodenoscopy were performed, and the results showed achalasia with megaesophagus. Later, the achalasia was confirmed intraoperatively. The patient underwent thoracotomy, esophagomyotomy, and Belsey mark IV fundoplication for his condition.

<u>Results:</u> He could swallow solid food without difficulty on postoperative day 3 (POD). Subsequently, on the same day, his chest drainage was removed. On POD 4, he was discharged uneventfully. Neither reflux, complications, nor a recurrence of his complaint were found during the one-month follow up.

<u>Conclusion</u>: Despite of its benefits and drawbacks, this report suggests that the transthoracic approach, compared to VATS and other surgical technique, of esophagomyotomy and Belsey mark IV fundoplication for achalasia patients can be performed safely and effectively. Postoperative follow-up showed a good result with no symptoms of recurrence or reflux.

P5 - The Outcome Of Emergency Lung Resection For Massive Hemoptysis In Tuberculosis: An Evidence Based Case Report

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<u>Background</u>: Hemoptysis is the most common complication of lung tuberculosis. The bronchial artery or its branches erosion due to cavitary infiltration, bronchiectasis, or destroyed lung can lead to massive bleeding and becoming life threatening. Lung resection plays an important role in the management of massive hemoptysis, and remains a life saving procedure. However, the high postoperative morbidity and mortality still remain a challenge, and causing dilemma in deciding lung resection.

<u>Aim</u>: To determine the outcome of lung resection in massive hemoptysis due to tuberculosis.

<u>Methods</u>: Literature searching was done using PubMed, Science Direct, and Cochrane Library. The outcome was postoperative mortality.

<u>Results</u>: 15 articles that address the clinical question was retrieved. The overall literatures indicated that the postoperative mortality rates is ranging between 3% to 12%, which is considerably low because it is not higher than the mortality rates of lung resection due to other causes.

<u>Conclusion</u>: The lung resection is recommended as the life saving procedure for massive hemoptysis. As the postoperative morbidity and mortality rates are acceptable, the lung resection is considered safe and should be performed earlier to prevent further complications

P6 - Air Plombage As Space-filling Procedure For Chronic Empyema: A Case Series

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<u>Background:</u> Empyema thoracis defined as collection of exudative fluid in pleural cavity. Empyema is often caused by pulmonary infection such as tuberculosis. The management of empyema is antibiotic, chest drainage, and obliteration of empyema cavity. Air plombage is one of the obliteration procedure for chronic empyema. We presents 3 cases of air plombage in our institution.

Case Presentation

Case 1: Female, 21 y.o., with shortness of breath since 1 month ago, was diagnosed as miliary tuberculosis and has taken tuberculosis drugs. Chest radiograph and CT scan showed chronic right hemithorax empyema with multiple calcifications. Patient underwent right thoracotomy. The pleura covered with thick peel, so air plombage was done as space-filling.

Case 2: Male, 32 y.o., with shortness of breath since one week, has been diagnosed as pulmonary tuberculosis since three months ago and has taken tuberculosis drugs. Chest radiograph and CT scan showed left pyopneumothorax and multiple fibrosis in left lung. We performed left thoracotomy and air plombage to obliterate empyema cavity.

Case 3: Male, 55 y.o., with shortness of breath since two months, has been taking tuberculosis drug for the first month. Chest radiograph and CT scan showed thick-walled cystic lesion with an air-fluid level within the left hemithorax. We performed left thoracotomy and decortication but the lung couldn't expand, so we performed air plombage.

Discussion and Conclusion: In chronic empyema, progressive thickening involving all pleural surfaces leads to fibrothorax, a condition in which the lung cannot be expanded. Thoracoplasty, the first space-filling for chronic empyema, causes several complications. Subsequently, air plombage was introduced as a procedure in which parietal pleura, periosteum, and intercostal muscles were collapsed without rib resection, thus avoiding severe deformity and preserving pulmonary function, making it the therapy of choice for patients who cannot tolerate thoracoplasty.

P7 - Delayed Presentation Of Post Traumatic Diaphragmatic Rupture In A 9 Year-Old-Boy – A District Hospital Experience

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<u>Background</u>: Diaphragmatic rupture occurs in 1% of traumatic injuries and may present in the acute or delayed setting. Commonly caused by penetrating or high velocity blunt thoraco-abdominal trauma, this injury may cause significant morbidity and mortality. We report a case of delayed traumatic diaphragmatic rupture in the paediatric population to expand its current literature. <u>Case Report</u>: A 9-year-old boy presented with left hypochondriac pain and dyspnoea following blunt abdominal trauma after falling off from a motorcycle and landed onto the handle four days earlier. His dyspnoea worsened after seeking village doctor advice. Clinical examination revealed reduced breath sounds over the left hemithorax and left hypochondriac tenderness with bruising. Computed tomography confirmed a ruptured left hemidiaphragm with transthoracic visceral herniation (figure 1). The child was stabilized and taken for exploratory laparotomy. Intra-operatively, a 15cm defect was seen over the posterolateral left hemidiaphragm causing herniation of the stomach, pancreas, spleen, transverse colon and omentum. The herniated viscera were reduced and concomitant injuries include a shattered spleen, pancreatic body and tail necrosis, fundal and pre-pyloric gastric perforations as well as serosal tear over the transverse colon. Splenectomy, distal pancreatectomy, and primary repair of the stomach and transverse colon were performed. The diaphragmatic defect was then repaired with a single layer of interrupted figure of eight non-absorbable sutures. The child's post-operative period was complicated with Klebsiella bacteraemia but was discharged well after antibiotic therapy.

<u>Conclusion</u>: We share a case of huge diaphragmatic rupture with transthoracic herniation of stomach, pancreas, colon and spleen that was successfully repaired in the district hospital setting. This case highlights the significance of diaphragmatic rupture with multiple solid organs injuries in a trauma patient. A high index of suspicion is needed to ensure that this injury is not missed as further delay may lead to high mortality rates.



Figure 1. Left diaphragmatic rupture causing transthoracic visceral herniation and mediastinal shift to the right

P8 - A Case Series Of Intrathoracic Solitary Fibrous Tumour At Serdang Hospital

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<u>Introduction</u>: Solitary fibrous tumour (SFT) is a distinctive benign neoplasm which originated from mesenchymal cells most frequently occurred in pleural but occasionally arising from other sites such as lung parenchymal, mediastinum or pericardium. Complete surgical resection of tumour remained the mainstay treatment of SFT. Herein we are describing a case series- total 8 cases of SFT tumour that underwent surgical resection at Hospital Serdang from year 2012 to 2021.

<u>Methods</u>: A retrospective analysis of a series of 8 patients undergoing solitary fibrous tumour resection in Hospital Serdang between January 2010 and March 2022 was conducted. Endpoints of this study were to address presentations, diagnostic modalities, pre-operative angioembolization, length of hospital stay, perioperative and early mortality and morbidity rates, and recurrence rate.

<u>Results</u>: The initial presentations of the disease are dyspnoea (75%), chest infection with fever (37.5%), loss of weight and appetite (12.5%) and incidental finding (25%). All patients have undergone contrast-enhanced computed tomography of thorax for diagnosis of the disease and one patient did magnetic resonance imaging of thorax due to suspicious of chest wall involvement. All of patients has established histopathological diagnosis pre-operatively using ultrasound guided biopsy (12.5%) and computed tomography guided biopsy (87.3%). 37.5% of patients had angioembolization done prior to the surgery. Excision of SFT was performed via median sternotomy+ partial clampshell (50%), left thoracotomy (37.5%) and conventional median sternotomy (12.5%). Mean length of hospital stay is 8.6 days. The incidence of postoperative mortality within 30 days is 12.5%. There was a patient with recurrence of solitary fibrous tumour of left hemithorax and one of patient received chemotherapy post-operatively.



Figure 1 Pre- operative CECT thorax and post tumour debulking specimen (Recurrence case)

<u>Conclusion</u>: Complete surgical resection of tumour via sternotomy or thoracotomy remained the mainstay treatment for intrathoracic solitary fibrous tumour. Patient with solitary fibrous tumour should be followed up postoperatively due to presence of risk of disease recurrence.

P9 - Surgical Management Of Complicated Severe Descending Necrotizing Mediastinitis Using Video-Assisted Thoracoscopic Surgery (VATS): A Case Series

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<u>Background:</u> Descending Necrotizing Mediastinitis (DNM) known as severe life threatening disease that results from complicated oropharyngeal and odontogenic infections. Even though its rare, once the diagnose has been established, early intervention with surgical drainage is mandatory in order to minimize morbidity and mortality.

<u>Objective:</u> This case series focused on two patients diagnosed with descending necrotizing mediastinitis from available clinical data, who underwent surgical drainage using Video-Assisted Thoracoscopic Surgery (VATS).

<u>Methods</u>: We report two cases of female adolescent (19 years old and 14 years old) patients who had been consulted to our departement with severe mediastinitis that complicated with bilateral empyema. Both of them had history of neglected odontogenic infections before the symptoms occurs. We perform surgical drainage and decortication using VATS. After surgery, both of patient transferred to intensive care unit for post operative care and monitoring.

<u>Results:</u> Even though the patients are critically ill and the post operative care are quite challenging (one of them underwent surgical tracheostomy), both of patients are alive and discharged after several weeks with adequate drainage and antibiotic therapy.

<u>Conclusion</u>: Descending Necrotizing Mediastinitis is life theratening complications with high morbidity and mortality. Once diagnosed, quick intervention including surgical drainage should be performed. The use of VATS can help to manage this condition and reduce mobidity and mortality on critically ill patient

P10 - Anatomical Pathology Findings Of Surgically Resected Mediastinal Masses In Dr Soetomo Academic General Hospital, Surabaya, Indonesia: A Summary Of 5 Years Observational Study

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<u>Background:</u> A myriad of pathology may present in mediastinum, both neoplastic and non-neoplastic. The differential diagnosis is derived from the tissue or structure from which the mass is arising. Diagnostic imaging is needed in the preparation of the surgery and anatomical pathology examination is performed. We report our experience and finding in surgically resected mediastinal masses during 5 years period.

<u>Aims:</u> This study provides our summary and experience in surgically resected mediastinal masses, especially in the anatomical pathology findings, post-operatively.

<u>Methods:</u> A retrospective observational study was performed in single-center thoracic department in Surabaya and included all patients underwent surgical resection during February 2017 to September 2022. Data were presented descriptively, including demographics, surgical methods, and anatomical pathology findings.

<u>Results:</u> A total of 89 patients were admitted and surgical resection of mediastinal masses was performed. Of these, 76 patients underwent open surgery (either thoracotomy or median sternotomy), while 13 patients underwent video-assisted thoracoscopic surgery (VATS). Up to 80.9% (n = 72) were anterior mediastinal masses, 12.4% (n = 11) were posterior mediastinal masses, 3.4% (n = 3) were middle mediastinal masses, and 3.4% (n = 3) were superior mediastinal masses. Anatomical pathology examination were performed. Of these, 37.1% (n = 33) were thymoma, 11.2% (n = 10) were teratoma, and 10.1% (n = 9) were thyroid carcinoma.

<u>Conclusion</u>: Our study reported that majority of our surgically resected mediastinal masses were thymoma which located in anterior mediastinal compartment. Knowledge and understanding of the varying mediastinal masses is crucial for thoracic surgeons to appropriately prepare the surgical strategy, avoid morbidity, and expedite hospitalization.

P11 - Air Plombage Method To Prevent Pleural Dead Space After Pulmonary Decortication In Tuberculosis Patient: A Case Report

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<u>Background</u>: Persistent bronchopleural fistula and dead space in the pleura after tuberculosis surgery will generally results in deliberating complications.

Objective: We report a successful case of patient where air plombage was performed to prevent the dead space

<u>Case Presentation</u>: A 31 year old male presented with shortness of breath for 4 months was admitted to our hospital. He had history of anti-tuberculosis drug for 3 months, negative sputum smear and HIV negative. Physical examination showed an absence of breath on the right side but no dullness on percussion. Further computer tomography (CT) scan showed right hydropneumothoraks with visceral pleural thickening and trapped right lung.

We performed right thoracotomy, and found fibrous peels on parietal and visceral pleura. We drained the caseous empyema and performed pulmonary decortication. The lung compliance was impaired and the lung wasn't able to fully expand. We stripped the 3rd until 6th ribs subperiosteally. The pleura, periosteum, fascia and intercostal muscle were then dropped into contact with the lung beneath. We then insert 32Fr chest tube intra pleurally, and then close the chest wall. He was extubated in the OR and stay for 25 hours at the ICU. The chest x-ray evaluation showed no dead space, the lung was expanded. The patient's recovery after the operation was uneventful and he was discharged on postoperative day 8.

<u>Discussion:</u> The air pocket intraoperatively was filled by muscles and blood of the patient. As the tissue heals, the lungs will slowly expands and push the pleura up until the chest wall. With this method, there were no chest wall deformities, faster and less traumatic recovery and no risk of paradoxical movement.



Figure 1. Chest X-ray preoperative and postoperative day 8

P12 - Schwannoma Of The Esophagus With Atypical Chest Pain: A Case Report

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<u>Background:</u> Benign primary tumors of the esophagus are uncommon, and account for only 2% of all esophageal tumors. Schwannomas are one of the rare benign esophageal tumors.

Aim: We present presentation a rare case of schwannoma with atypical presentation.

<u>Case presentation</u>: A 46-year-old man came with complaints of atypical chest pain, normal ECG. Patient experienced no weight loss and no sign of dysphagia. An enlargement of mediastinum was found on chest x-ray with remarkable laboratory studies. A chest computed tomography scan showed a lobulated tumour (100x70x25 mm) in the middle mediastinum, with homogenous inner structure. The mass was located between mucosa and muscularis propria and adventitia. There were sign of compression of the esophagus lumen.

We performed right thoracotomy to approach the mass, resect the tumour and the esfagus was sutured primarily, and no leak was found. The patient was sent to the intensive care. Biopsy showed high cell proliferation encircling the vessel. Tumour nucleus were shaped like a spindle, equal chromatin across the nuclei, with minimal cytoplasm and some atypical cells. Mitosis cell are scarce, with absence of necrosis. This finding confirmed the diagnosis of schwannoma. Postoperative course was uneventful, and the patient was discharged on the 5th postoperative day.

<u>Results:</u> This was a unique case where the schwannoma of the esophagus was presented with an atypical chest pain and there was no sign of gastrointestinal problem.

Conclusion: The rare case of schwannoma in the esophagus can be manifested by atypical chest pain.



Figure 1. Esophageal schwannomas after resection

P13 - Case Report: Minimally Invasive Surgery For Esophageal Cancer

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Introduction: Use of the minimally invasive approach for the management of cancer surgery is still in the developmental phase in Mongolia. In our hospital, we had started using laparoscopic approach for gastric cancer surgery since 2016. Concept of Minimally invasive surgery is to reduce operation site trauma, improve pain management and improve recovery process. The aim of this study was to describe our experience in Minimally Invasive surgery and to evaluate the safety of this minimally invasive approach in the treatment of patients affected by esophageal or EGJ cancer. Nowadays we have adopted a minimally invasive strategy and experience in minimally invasive surgery has allowed us to improve our technique. Recently, we performed a thoracoscopic, VATS and laparoscopic approach with lvor-Lewis operation.

<u>Methods:</u> 53 years old male patient, complained of dysphagia, weight loss and chest pain. On September 2021, Minimally Invasive esophagectomy was performed on a patient with squamous cell carcinoma located in the middle esophagus. Body mass index 22,8. Preoperative preparation was smoking cessation and teaching inhalation of inspirometer



Figure 1. Shows surgical incision sites

<u>Results:</u> Operation was successfully performed without needing of open conversion and duration of 540 minutes, blood loss 100 ml. Oral water intake was started 5 days after surgery. Hospital stay was 9 days. No intraoperative neither postoperative complications were found. Histological report was squamous cell carcinoma, well differentiated. Tumor size 3.5 x 1.5 x 1.2 cm. The number of lymph nodes retrieved was 42. Metastatic carcinoma in 2 lymph nodes. Safety margins: Proximal 1 cm, distal 7 cm. Pathologic stage was pT3N2M0 Stage IIIB (Classified by AJCC 8th TNM Staging System)

<u>Conclusion</u>: This case report shows that minimally invasive esophagectomy can produce good results in terms of safety and oncologic adequacy for malignant tumors. More big sized and long term studies are needed. Furthermore, we should develop our minimally invasive approach for the management of the cancer surgery and increase our number of surgeries by minimally invasive approach.

P14 - Case Report: Two-portal Video-assisted Thoracoscopic Surgery For Esophageal Diverticulum

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Introduction: Esophageal diverticulum (ED) is disorder related to esophageal motility. Surgery is indicated in patients with severe symptoms as dysphagia, esophagitis, anorexia, regurgitation and weight loss. Although open surgery is the standard approach, recently an increasing number of papers have reported the use of minimally invasive approaches for performing diverticulectomy and myotomy in order to reduce the surgical trauma and favor a fast return to daily activity. In this report, we present our initial experience with Two-Portal VATS operation for ED.

<u>Case presentation</u>: 73 years old female patient, complained from dysphagia and anorexia for a year, Endoscopy revealed a large diverticulum in middle third /26-30 cm from incisor/ of esophagus, many impacted food in diverticulum. CT scan also evidenced Diverticulum in middle third of esophagus. /1.9x1.6x5.0 in size/ Two-Portal VATS was performed.

<u>Result</u>: Operation was successfully performed without needing of open conversion and duration of 80 minutes, blood loss 10 ml. No intraoperative neither postoperative complications were found. The chest drain was removed 78 hours after the surgery and hospital stay was 7 days. No recurrence of diverticulum was seen during 3 months follow up.

<u>Discussion</u>: In spite the fact that open surgery is the standard approach in symptomatic patients with large esophageal diverticula, recently various minimally invasive techniques including laparoscopy and VATS have been developed to treat this condition. Traditional VATS is usually performed with three-four incisions but over the years there has been an evolution of VATS from multi-ports to single port.

<u>Conclusion</u>: Two-Portal VATS is feasible procedure that in theory could reduce the surgical trauma compared to conventional open method. In the near future, we will intend to apply Uniportal VATS technique for ED



Figure 1. Endoscopy revealed a large diverticula in middle third /26-30 cm from incisor/ of esophagus

Figure 2. After 3 months follow up

P15 - Study On Clinical Outcomes Of Video-assisted Thoracoscopic Surgery

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<u>Objectives:</u> Video-assisted thoracoscopic surgery (VATS) is finding an ever-increasing role in the diagnosis and treatment of a wide range of thoracic disorders. The potential advantages of video-assisted thoracoscopic surgery include less postoperative pain, fewer operative complications, shortened hospital stay and reduced costs.

<u>Methods:</u> We recruited inpatients from January 2017 to December 2022; all were treated by VATS and regular follow-up. A total of 100(n) VATS were enrolled.

<u>Results:</u> The average operating time was 152 minutes, and the average estimated blood loss was 110 ml. The patients was discharged on the 6^{th} postoperative day without any complications. The comorbidities included former thoracic surgery (n=75), a history of another cancer (n=15). VATS complications were identified in 7%(n=7) patients. Those complications include chylothorax, pneumothorax, bleeding and respiratory dysfunction. No air leakage was observed.

<u>Conclusions:</u> The complication and mortality rates are generally very low and VATS procedures are considered safe and effective. The role of VATS is taking increasingly important place and can be seen as an eminent technique to early stage lung cancer and benign tumor or other disease.



P16 - Case Report: A Case Of Pleomorphic Sarcoma Of Left Femur With Large Pleural Metastasis TS CHANG¹, ALIZAN K², BK YOONG³, KRISHNASAMY S¹ ¹ DIVISION OF CARDIOTHORACIC SURGERY, UNIVERSITY MALAYA, MALAYSIA ²DIVISION OF PLASTIC AND RECONSTRUCTION SURGERY, UNIVERSITY MALAYA, MALAYSIA

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Introduction: Undifferentiated pleomorphic sarcoma is a subtype of soft tissue sarcomas- a heterogeneous group of mesenchymal neoplasms that commonly occur in the extremities (proximal femur or humerus) or retroperitoneal space. It usually derived from connective tissues such as adipose tissue, blood vessels, nerves, bone, and cartilage. Surgical wide local excision of tumour with clear surgical margin followed by radiation therapy is the treatment of choice. However local recurrence rate is as high as 40-60% with high potential of distant metastasis to lung, lymph nodes and liver in 25-50% of the cases. We are reporting a case of recurrent metastasis of undifferentiated pleomorphic sarcoma of right femur to right thoracic region which required extensive *En-Bloc* resection of the mass with rib platting, diaphragm, and chest wall reconstruction.

<u>Case presentation</u>: Patient is a 28 years old lady with underlying history of undifferentiated pleomorphic sarcoma of left distal femur (post wide local excision of tumour in year 2019). Subsequently, she underwent right lower lobectomy in year 2020 and wedge resection of left lung in year 2021 for distant metastatic of the undifferentiated pleomorphic sarcoma. She started developing right chest wall pain and shortness of breath over the past 2 months. PET CT noted there was no local recurrence of the disease but presence of a large right pleural mass (10x15x16cm) involving diaphragm, compressing on liver and inferior vena cava. *En Bloc* resection of right pleural mass with diaphragm resection and liver mobilization via right thoracotomy (U- shaped incision) was performed. Right diaphragm reconstruction with pedicle latissimus dorsi flap and chest wall reconstruction with ribs plating was done. Patient recovered well post operatively with no complication.



Figure 1: Post reconstruction of chest wall with ribs plating with U-Shape incision

<u>Conclusion</u>: Complete surgical resection of tumour is the mainstay treatment for metastatic pleomorphic sarcoma. A multidiscipline team approach is the key to archieve a complete R0 resection.