1. Funktionelle, präoperative Abklärung

1.1. Die Diffusionskapazität ist ein wichtiger Präditktor für die präoperative Morbidität bei Patienten mit und ohne COPD

Ferguson MK, Vigneswaran WT. Diffusing capacity predicts morbidity after lung resection in patients without obstructive lung disease. Ann Thorac Surg 2008; 85(4):1158-1164.

1.2. Treppensteigen als Screening-Maßnahme vor weiterer apparativer Diagnostik

Brunelli A, Refai M, Xiume F et al. Performance at symptom-limited stair-climbing test is associated with increased cardiopulmonary complications, mortality, and costs after major lung resection. Ann Thorac Surg 2008; 86(1):240-247.

2. Lungenkarzinom

2.1. Präoperatives Staging

2.1.1. Re-Staging nach Induktionstherapie bei lokal fortgeschrittenen Lungenkarzinomen

Herth FJ, Annema JT, Eberhardt R et al. Endobronchial ultrasound with transbronchial needle aspiration for restaging the mediastinum in lung cancer. J Clin Oncol 2008; 26(20):3346-3350.

Marra A, Hillejan L, Fechner S et al. Remediastinoscopy in restaging of lung cancer after induction therapy. J Thorac Cardiovasc Surg 2008; 135(4):843-849.

2.1.2. Transbronchiale versus extrabronchiale Biopsie zum Staging von mediastinalen Lymphknoten

Ernst A, Anantham D, Eberhardt R et al. Diagnosis of mediastinal adenopathy-real-time endobronchial ultrasound guided needle aspiration versus mediastinoscopy. J Thorac Oncol 2008; 3(6):577-582.

Herth FJ, Eberhardt R, Krasnik M et al. Endobronchial ultrasound-guided transbronchial needle aspiration of lymph nodes in the radiologically and positron emission tomography-normal mediastinum in patients with lung cancer. Chest 2008; 133(4):887-891.

Herth FJ, Morgan RK, Eberhardt R et al. Endobronchial ultrasound-guided miniforceps biopsy in the biopsy of subcarinal masses in patients with low likelihood of non-small cell lung cancer. Ann Thorac Surg 2008; 85(6):1874-1878.

2.1.3. Wertigkeit des PET beim Staging des Lungenkarzinoms nach wie vor unklar

Kozower BD, Meyers BF, Reed CE et al. Does positron emission tomography prevent nontherapeutic pulmonary resections for clinical stage IA lung cancer? Ann Thorac Surg 2008; 85(4):1166-1169.

Tournoy KG, Maddens S, Gosselin R et al. Integrated FDG-PET/CT does not make invasive staging of the intrathoracic lymph nodes in non-small cell lung cancer redundant: a prospective study. Thorax 2007; 62(8):696-701.

2.1.4. Beurteilung der Brustwandinvasion durch Ultraschall bzw. CT

Bandi V, Lunn W, Ernst A et al. Ultrasound vs. CT in detecting chest wall invasion by tumor: a prospective study. Chest 2008; 133(4):881-886.

2.2. Op-Indikation

2.2.1. Lungenkarzinom mit Begleitherd: Operieren?

Rostad H, Strand TE, Naalsund A et al. Resected synchronous primary malignant lung tumors: a population-based study. Ann Thorac Surg 2008; 85(1):204-209.

2.2.2. Adrenalektomie bei singulärer Nebennierenmetastase?

Tanvetyanon T, Robinson LA, Schell MJ et al. Outcomes of adrenalectomy for isolated synchronous versus metachronous adrenal metastases in non-small-cell lung cancer: a systematic review and pooled analysis. J Clin Oncol 2008; 26(7):1142-1147.

2.3. Op-Technik

2.3.1. Minimal-invasive videoassistierte Lungenresektionen

Cattaneo SM, Park BJ, Wilton AS et al. Use of video-assisted thoracic surgery for lobectomy in the elderly results in fewer complications. Ann Thorac Surg 2008; 85(1):231-235.

McKenna RJ, Jr., Mahtabifard A, Pickens A et al. Fast-tracking after video-assisted thoracoscopic surgery lobectomy, segmentectomy, and pneumonectomy. Ann Thorac Surg 2007; 84(5):1663-1667.

Swanson SJ, Herndon JE, D'Amico TA et al. Video-assisted thoracic surgery lobectomy: report of CALGB 39802-a prospective, multi-institution feasibility study. J Clin Oncol 2007; 25(31):4993-4997.

2.4. Op-Ergebnisse

2.4.1. Ergebnis der operativen Therapie bei N2-Befall

Mansour Z, Kochetkova EA, Santelmo N et al. Persistent N2 disease after induction therapy does not jeopardize early and medium term outcomes of pneumonectomy. Ann Thorac Surg 2008; 86(1):228-233.

Riquet M, Bagan P, Le Pimpec BF et al. Completely resected non-small cell lung cancer: reconsidering prognostic value and significance of N2 metastases. Ann Thorac Surg 2007; 84(6):1818-1824.

Swanson SJ, Herndon JE, D'Amico TA et al. Video-assisted thoracic surgery lobectomy: report of CALGB 39802--a prospective, multi-institution feasibility study. J Clin Oncol 2007; 25(31):4993-4997.

2.4.2. Mortalität nach thoraxchirurgischen Eingriffen bei Lungenkarzinom

Boffa DJ, Allen MS, Grab JD et al. Data from The Society of Thoracic Surgeons General Thoracic Surgery database: the surgical management of primary lung tumors. J Thorac Cardiovasc Surg 2008; 135(2):247-254.

2.4.3. Lungenfunktion, Belastbarkeit und Lebensqualität nach resezierenden thoraxchirurgischen Eingriffen

Balduyck B, Hendriks J, Lauwers P et al. Quality of life after lung cancer surgery: a prospective pilot study comparing bronchial sleeve lobectomy with pneumonectomy. J Thorac Oncol 2008; 3(6):604-608.

Win T, Groves AM, Ritchie AJ et al. The effect of lung resection on pulmonary function and exercise capacity in lung cancer patients. Respir Care 2007; 52(6):720-726.

2.4.4. Was passiert nach 5 Jahren? - Langzeitergebnisse nach Pneumonektomie und Lobektomie

Kim DJ, Lee JG, Lee CY et al. Long-term survival following pneumonectomy for non-small cell lung cancer: clinical implications for follow-up care. Chest 2007; 132(1):178-184.

2.5. Limitierte Resektionen

2.5.1. Segmentresektion als Alternative zur Lappenresektion im Stadium I Lungenkarzinom

Atkins BZ, Harpole DH, Jr., Mangum JH et al. Pulmonary segmentectomy by thoracotomy or thoracoscopy: reduced hospital length of stay with a minimally-invasive approach. Ann Thorac Surg 2007; 84(4):1107-1112.

Schuchert MJ, Pettiford BL, Keeley S et al. Anatomic segmentectomy in the treatment of stage I non-small cell lung cancer. Ann Thorac Surg 2007; 84(3):926-932.

Sienel W, Dango S, Kirschbaum A et al. Sublobar resections in stage IA non-small cell lung cancer: segmentectomies result in significantly better cancer-related survival than wedge resections. Eur J Cardiothorac Surg 2008; 33(4):728-734.

2.5.2. Operation versus dreidimensionale konformale Bestrahlung bei Hochrisikopatienten mit Stadium I Lungenkarzinom

Yendamuri S, Komaki RR, Correa AM et al. Comparison of limited surgery and three-dimensional conformal radiation in high-risk patients with stage I non-small cell lung cancer. J Thorac Oncol 2007; 2(11):1022-1028.

2.6. Multimodale Behandlungsmodalitäten beim Lungenkarzinom

2.6.1. Wertigkeit der präoperativen Radiochemotherapie im Vergleich zur Chemotherapie (Münsteraner Studie)

Thomas M, Rube C, Hoffknecht P et al. Effect of preoperative chemoradiation in addition to preoperative chemotherapy: a randomised trial in stage III non-small-cell lung cancer. Lancet Oncol 2008; 9(7):636-648.

2.6.2. Multimodale Therapie bei Pancoast-Tumoren

Kunitoh H, Kato H, Tsuboi M et al. Phase II trial of preoperative chemoradiotherapy followed by surgical resection in patients with superior sulcus non-small-cell lung cancers: report of Japan Clinical Oncology Group trial 9806. J Clin Oncol 2008; 26(4):644-649.

2.7. Lungenkarzinom Varia

2.7.1. Lungenkarzinom: Was passiert, wenn man nichts tut?

Raz DJ, Zell JA, Ou SH et al. Natural history of stage I non-small cell lung cancer: implications for early detection. Chest 2007; 132(1):193-199.

3. Postoperative Komplikationen

3.1. Postoperative Pneumonie

Radu DM, Jaureguy F, Seguin A et al. Postoperative pneumonia after major pulmonary resections: an unsolved problem in thoracic surgery. Ann Thorac Surg 2007; 84(5):1669-1673.

3.2. Postpneumonektomie-Syndrom: Inzidenz und chirurgische Behandlungsoptionen

Shen KR, Wain JC, Wright CD et al. Postpneumonectomy syndrome: surgical management and long-term results. J Thorac Cardiovasc Surg 2008; 135(6):1210-1216.

4. Mesotheliom

4.1. Diagnostik

4.1.1. Serummarker für das Mesotheliom?

Pass HI, Wali A, Tang N et al. Soluble mesothelin-related peptide level elevation in mesothelioma serum and pleural effusions. Ann Thorac Surg 2008; 85(1):265-272.

4.1.2. Thorakoskopie sichert nicht immer den histologischen Subtyp des Mesothelioms

Greillier L, Cavailles A, Fraticelli A et al. Accuracy of pleural biopsy using thoracoscopy for the diagnosis of histologic subtype in patients with malignant pleural mesothelioma. Cancer 2007; 110(10):2248-2252.

4.2. Chirurgische Behandlungsoptionen bei Mesotheliom: Extrapleurale Pneumonektomie versus Pleurektomie/Dekortikation

Flores RM, Pass HI, Seshan VE et al. Extrapleural pneumonectomy versus pleurectomy/decortication in the surgical management of malignant pleural mesothelioma: results in 663 patients. J Thorac Cardiovasc Surg 2008; 135(3):620-6, 626.

Rice DC, Stevens CW, Correa AM et al. Outcomes after extrapleural pneumonectomy and intensity-modulated radiation therapy for malignant pleural mesothelioma. Ann Thorac Surg 2007; 84(5):1685-1692.

4.3. Postinterventionelle Bestrahlung nach diagnostischer Intervention oder Drainage beim Mesotheliom nicht notwendig

O'Rourke N, Garcia JC, Paul J et al. A randomised controlled trial of intervention site radiotherapy in malignant pleural mesothelioma. Radiother Oncol 2007; 84(1):18-22.

5. Lungenmetastasen

5.1. Chirurgische Therapie von Nierenzellkarzinom-Metastasen

Whitson BA, Groth SS, Andrade RS et al. Extension of survival by resection of asynchronous renal cell carcinoma metastases to mediastinal lymph nodes. J Thorac Cardiovasc Surg 2008; 135(5):1022-1028.

6. Pneumothorax / Empyem

6.1. Chirurgische Pleurodese beim primären Pneumothorax: Pleurektomie versus Pleuraabrasio

Barker A, Maratos EC, Edmonds L et al. Recurrence rates of video-assisted thoracoscopic versus open surgery in the prevention of recurrent pneumothoraces: a systematic review of randomised and non-randomised trials. Lancet 2007; 370(9584):329-335.

Rena O, Massera F, Papalia E et al. Surgical pleurodesis for Vanderschueren's stage III primary spontaneous pneumothorax. Eur Respir J 2008; 31(4):837-841.

6.2. Effektivität der unilateralen Volumenreduktion beim Emphysem

Meyers BF, Sultan PK, Guthrie TJ et al. Outcomes after unilateral lung volume reduction. Ann Thorac Surg 2008; 86(1):204-211.

7. Pleuraerguss

7.1. Pleuraerguss: Man darf mehr als einen Liter abpunktieren

Feller-Kopman D, Berkowitz D, Boiselle P et al. Large-volume thoracentesis and the risk of reexpansion pulmonary edema. Ann Thorac Surg 2007; 84(5):1656-1661.

7.2. Ambulante Dauerdrainage bei malignem Pleuraerguss

Janes SM, Rahman NM, Davies RJ et al. Catheter-tract metastases associated with chronic indwelling pleural catheters. Chest 2007; 131(4):1232-1234.

Warren WH, Kalimi R, Khodadadian LM et al. Management of malignant pleural effusions using the Pleur(x) catheter. Ann Thorac Surg 2008; 85(3):1049-1055.

8. Lungentransplantation

8.1. Ist die bilaterale Lungentransplantation wirklich besser?

Mason DP, Rajeswaran J, Murthy SC et al. Spirometry after transplantation: how much better are two lungs than one? Ann Thorac Surg 2008; 85(4):1193-201, 1201.

8.2. Bringt die Lungentransplantation bei Kindern mit zystischer Fibrose einen Überlebensvorteil?

Aurora P, Spencer H, Moreno-Galdo A. Lung transplantation in children with cystic fibrosis: a view from Europe. Am J Respir Crit Care Med 2008; 177(9):935-936.

Liou TG, Adler FR, Cox DR et al. Lung transplantation and survival in children with cystic fibrosis. N Engl J Med 2007; 357(21):2143-2152.

Sweet SC, Aurora P, Benden C et al. Lung transplantation and survival in children with cystic fibrosis: solid statistics--flawed interpretation. Pediatr Transplant 2008; 12(2):129-136.

9. Trichterbrust

9.1. Minimal invasive Trichterbrustkorrektur bei Erwachsenen

Gips H, Zaitsev K, Hiss J. Cardiac perforation by a pectus bar after surgical correction of pectus excavatum: case report and review of the literature. Pediatr Surg Int 2008; 24(5):617-620.

Pilegaard HK, Licht PB. Routine use of minimally invasive surgery for pectus excavatum in adults. Ann Thorac Surg 2008; 86(3):952-956.

9.2. Einfluss der Trichterbrustkorrektur auf die Herz-Kreislauf- und Lungenfunktion

Guntheroth WG, Spiers PS. Cardiac function before and after surgery for pectus excavatum. Am J Cardiol 2007; 99(12):1762-1764.

Malek MH, Berger DE, Marelich WD et al. Pulmonary function following surgical repair of pectus excavatum: a meta-analysis. Eur J Cardiothorac Surg 2006; 30(4):637-643.