



SOLUNUM BULUŐMALARI

ŐANLIURFA

8-9 Ekim 2022

Hilton Garden Inn, Őanlıurfa

Solunum BuluŐmaları: Őanlıurfa

MINIMAL İNVAZİV GÖGÜS CERRAHİSİ OLGU ÖRNEKLERİ

PROF.DR.MUZAFFER METİN
SBÜ ULUSLAR ARASI TIP FAKÜLTESİ
GÖGÜS CERRAHİSİ ABD
YEDİKULE SUAM

Minimal İnvaziv Torasik Cerrahi Nedir?



Minimal İnvaziv Cerrahi klasik torakotomi ile yapılan operasyonların video yardımı ile küçük kesilerden yapılmasıdır.

VATS (Video assisted thoracic surgery)

- Kamera Yardımı ile yapılan ameliyatlara

RATS (robotic assisted thoracic surgery)

- Bilgisayar yardımı ile cerrahi enstrumanların kontrollüne



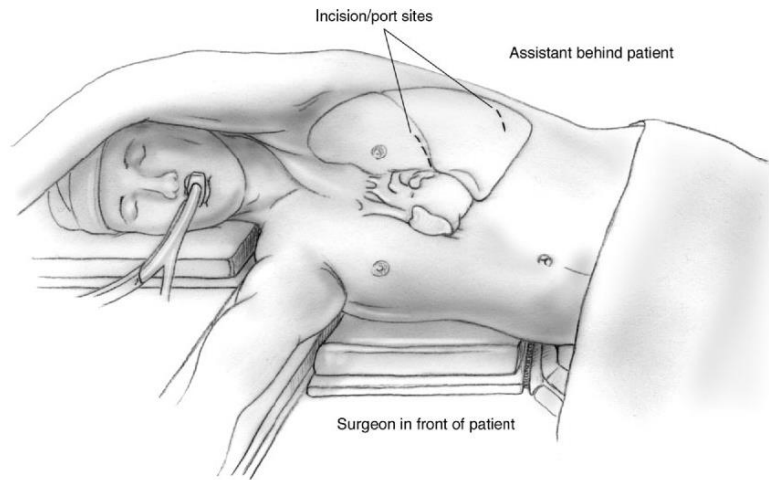
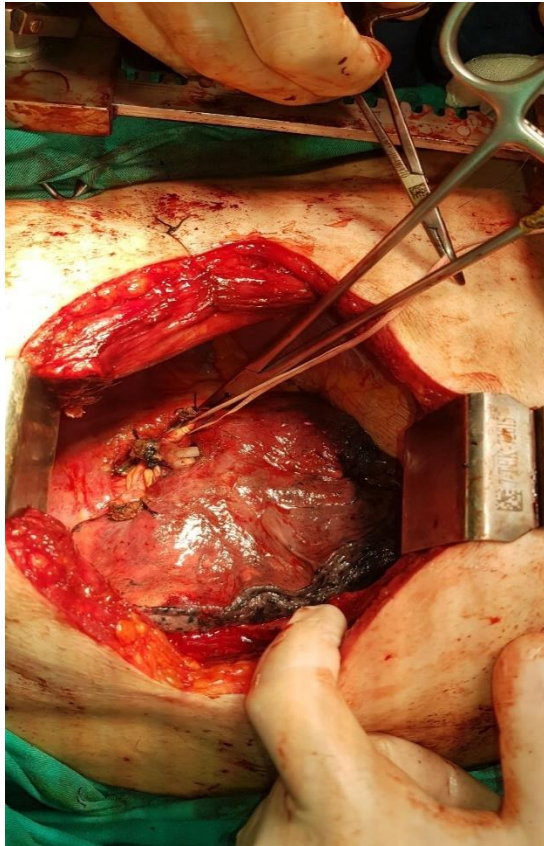


FIGURE 32.2 Positioning and port placement. Patient is placed in the lateral decubitus position. Our approach uses incisions that are placed in (1) the 7th or 8th intercostal space along the posterior axillary line, (2) the 5th or 6th intercostal space anteriorly. (Reprinted from Pham D, Balderson S, D'Amico TA. Technique of thoroscopic segmentectomy. *Oper Tech Thorac Cardiovasc Surg* 2008;13(3):188–203. Copyright © 2008 Elsevier. With permission.)



Neden VATS ?



Tek port VATS



MIT S Avantajları



- ✓ Kısa yatış süresi
- ✓ Daha az ağrı
- ✓ Postoperatif erken taburculuk
- ✓ Daha az intraoperatif kanama

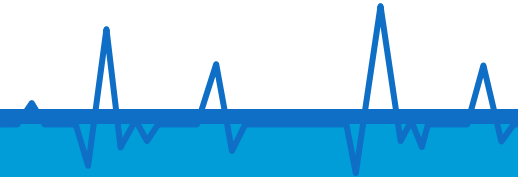


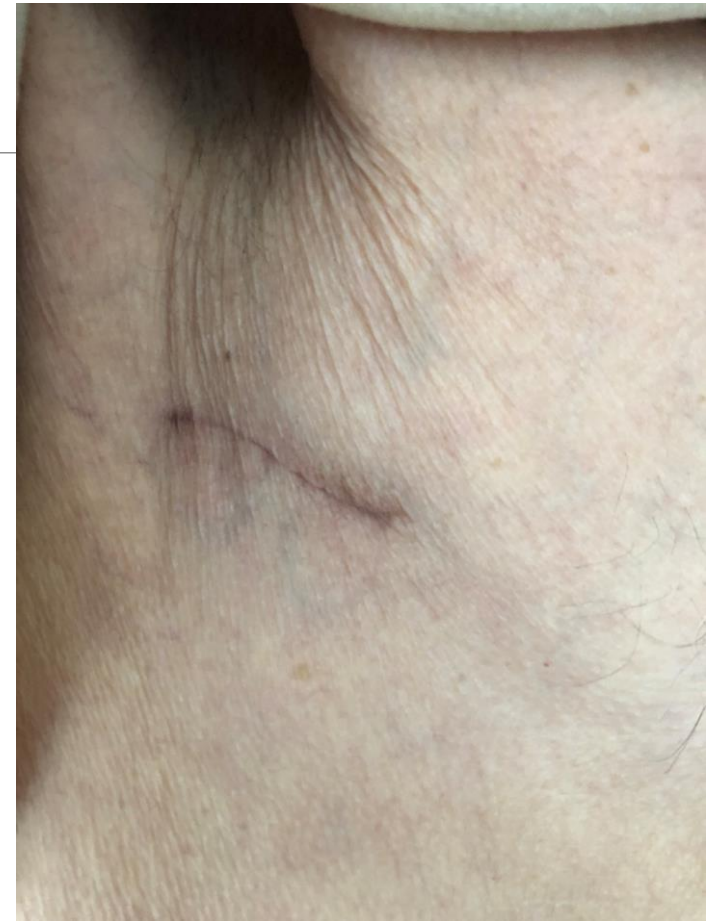
Hasta Açısından

- ✓ Morbititelerin daha az olması
- ✓ Kas fonksiyonlarının korunması
- ✓ Uzun dönem sağkalım

Cerrah Açısından

- ✓ Daha Kolay Öğrenim
- ✓ Apikal ve Bazal Alanlara Kolay Ulaşım



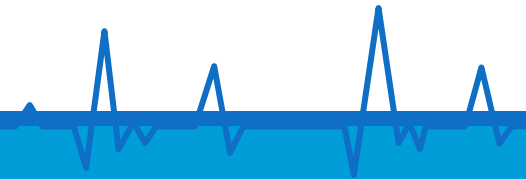


TEK PORT RLL

VATS Ne Yapabiliriz

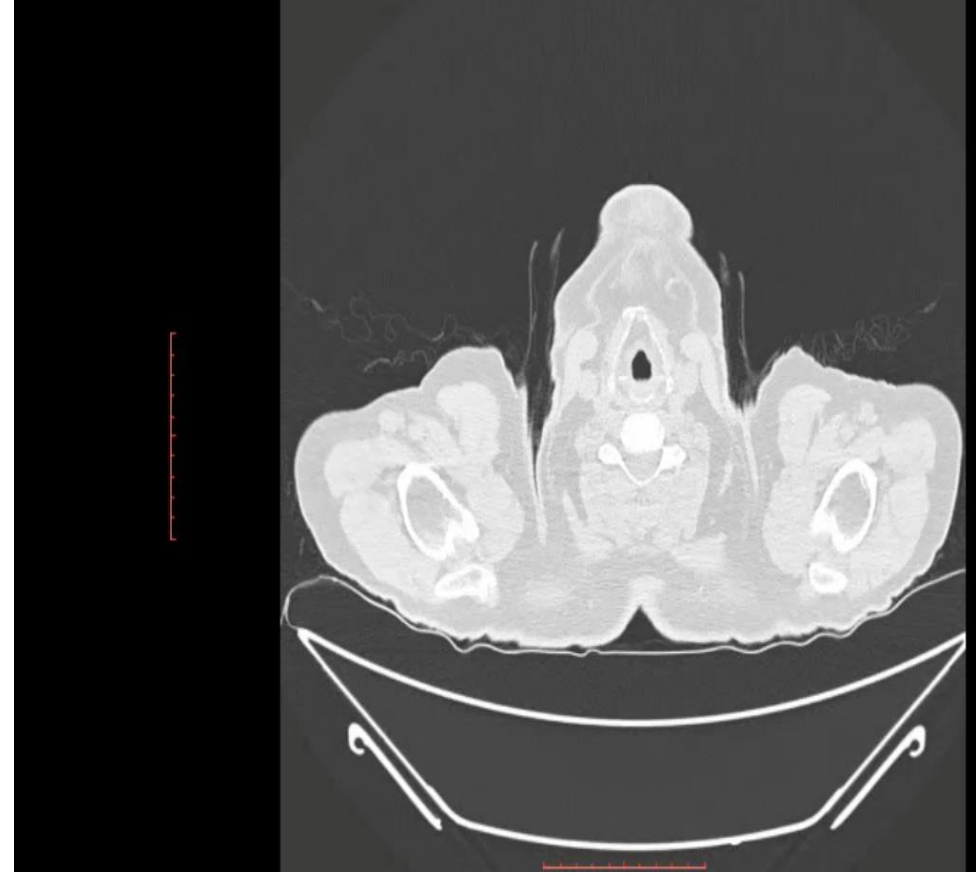
Tanısal İşlemler

Terapötik

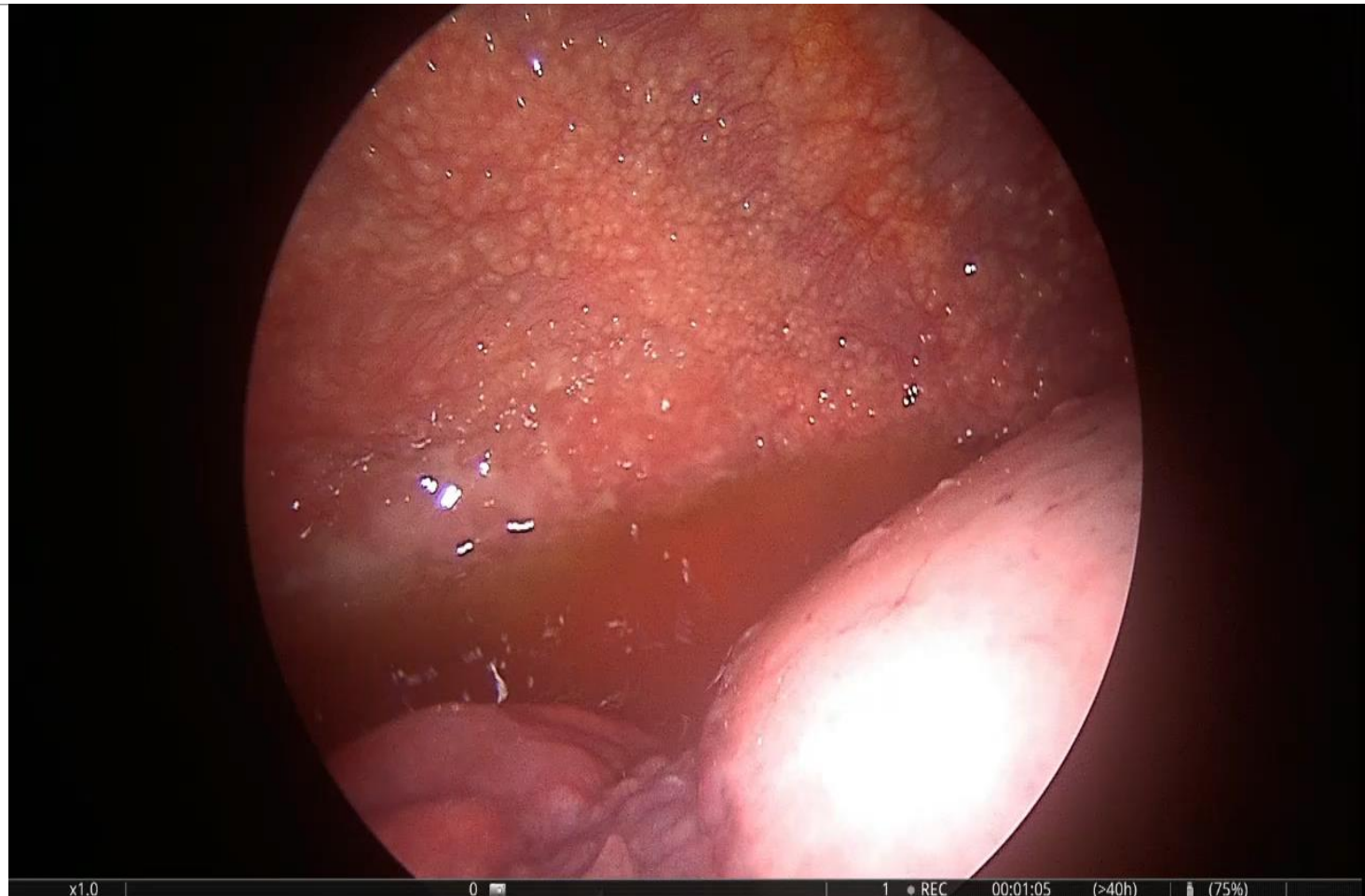
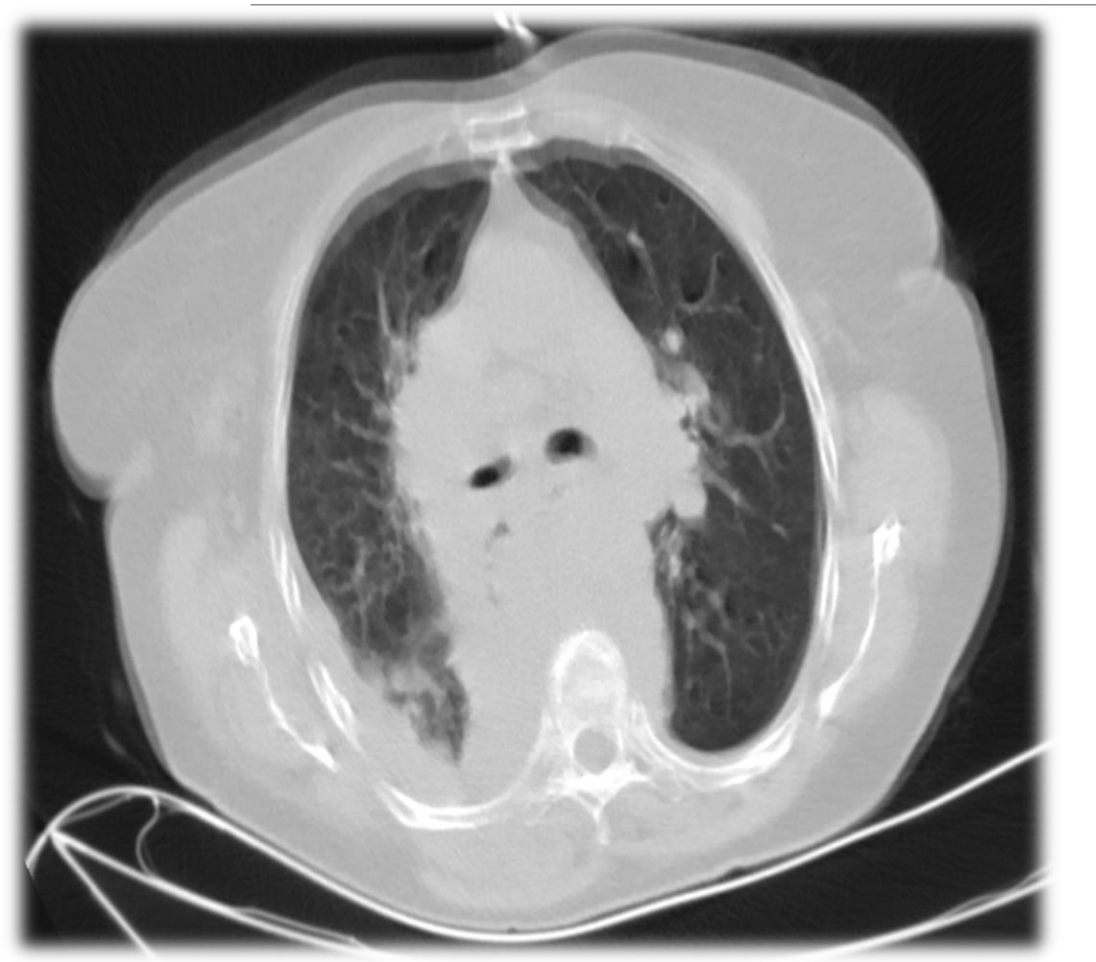


Akciğer Biyopsisi/VATS BİOPSİ

- Cerrahi akciğer biyopsi diffüz intertisyel akciğer hastalığında detaylı tanı için önerilen altın standart yöntemdir
- İAH 'da en az 2 farklı lobtan biyopsi alınır



Pleural Nodules



x1.0 | 0 | 1 • REC | 00:01:05 (>40h) | (75%)

VATS DELOKÜLASYON/DEKORTİKASYON

37 yaş, Erkek hasta,

Ateş (39 C), yan ağrısı

03.01.2022 Acil servise
başvuru

Torasentezde ampiyem
saptanıp Tüp torakostomi
uygulanıyor

350 cc drenaj



Ornevan Laboratuvarı TEKNİK SONUÇLARI

İsteyen Servis : Acil Poliklinik İsteyen

Barkodu : 111145231873 İstem Zamanı 03.01.2022 18:37 Barkod Zamanı 03.01.2022 18:37 Örnek Alma

Başvuru No : 2022 / 5682

| Tetkik | Sonuç | Ünite | Referans Değerler |
|---|-------|---------------|-------------------------|
| Glukoz (Serum) | ↑ 303 | mg/dl | 70 - 110 |
| Kan üre azotu (BUN) | 22 | mg/dl | 10 - 50 |
| Kreatinin | 0.75 | mg/dl | 0.30 - 1.2 |
| GFR | 118.0 | ml/dk/1,73 m2 | 70 - 140 |
| Protein (Serum) | 77.9 | g/L | 60 - 85 |
| Albümin (Serum) | 37.7 | g/L | 32 - 52 |
| Kalsiyum (Ca) | 9.1 | mg/dl | 8.6 - 10.6 |
| Sodyum (Na) (serum ve vücut sıvılarında, herbiri) | ↓ 132 | mEq/L | 133 - 150 |
| Klor (Cl) | 96 | mmo/L | 95 - 115 |
| Bilirubin (total/direkt) | 0.53 | mg/dl | 0 - 1.2 |
| BİLİRUBİN (İNDREKT) | 0.25 | mg/dl | 0 - 0.8 |
| Aspartat transaminaz (AST) | 11 | U/L | < 50 |
| Alanin aminotransferaz (ALT) | 18 | U/L | < 50 |
| Gamma glutamil transferaz (GGT) | ↑ 126 | U/L | < 80 |
| Laktik Dehidrogenaz (LDH) (Serum) | 146 | U/L | < 247 |
| CRP | 310.6 | mg/L | riskli: >5 Normali: 0-5 |
| BİLİRUBİN DIREKT | 0.28 | mg/dl | 0 - 0.5 |

Ornevan Laboratuvarı TEKNİK SONUÇLARI

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Barkodu : 140145231873 İstem Zamanı 03.01.2022 18:37 Barkod Zamanı 03.01.2022 18:37 Örnek Alma

Başvuru No : 2022 / 5682

| Tetkik | Sonuç | Ünite | Referans Değerler |
|--------------------|---------|---------|-------------------|
| Tam Kan (Hemogram) | | | |
| WBC | ↑ 23.95 | 10e3/uL | 4 - 10 |
| RBC | 4.63 | 10e6/uL | 3.5 - 5.5 |
| HGB | 13.4 | g/dL | 11 - 16 |
| HCT | 40.1 | % | 37 - 54 |
| MCV | 86.6 | fL | 80 - 100 |
| MCH | 29 | pg | 27 - 34 |
| MCHC | 33.4 | g/dL | 32 - 36 |
| RDW-CV | 12.6 | % | 11 - 16 |
| RDW-SD | 37.9 | % | 35 - 56 |
| PLT | ↑ 589 | 10e3/uL | 150 - 450 |
| PCT | ↑ 0.42 | % | 0.108 - 0.282 |
| MPV | 7.2 | fL | 6.5 - 12 |

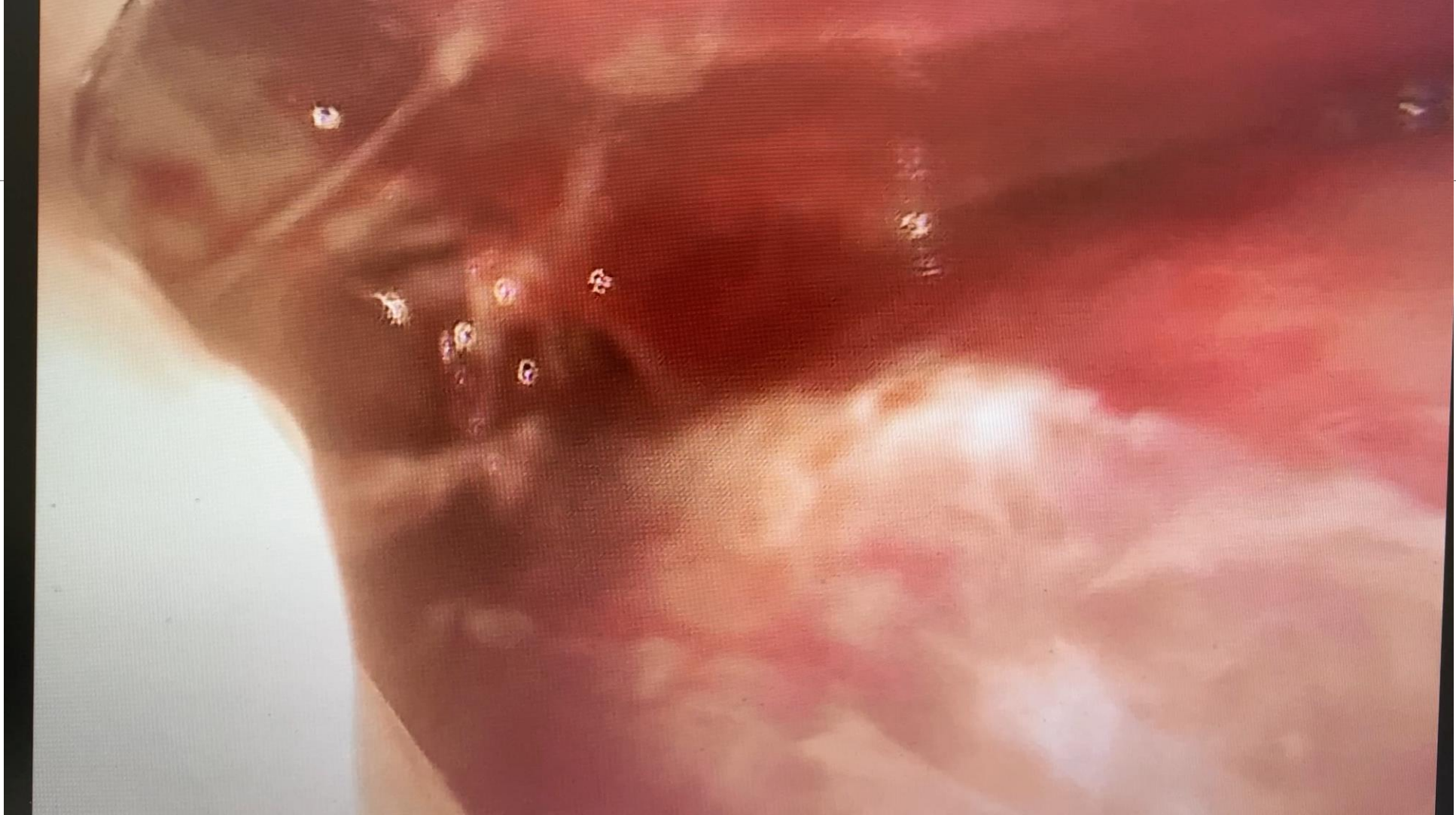
05.01.2022

2 gndr 100 cc drenaj mevcut, BT isteniyor,



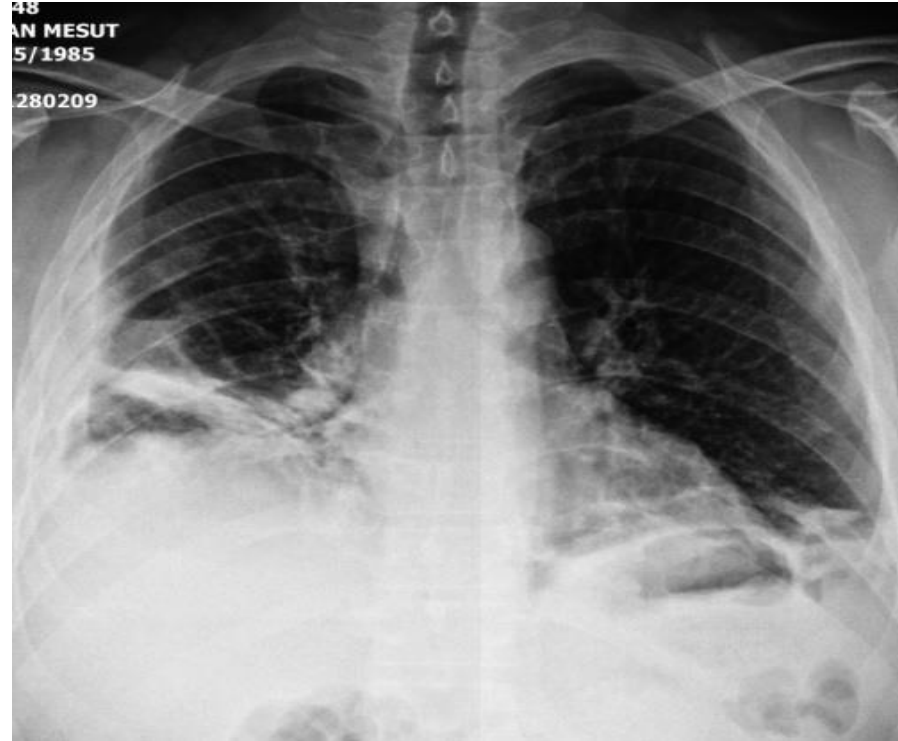
Delokulasyon amacıyla VATS planlanıyor





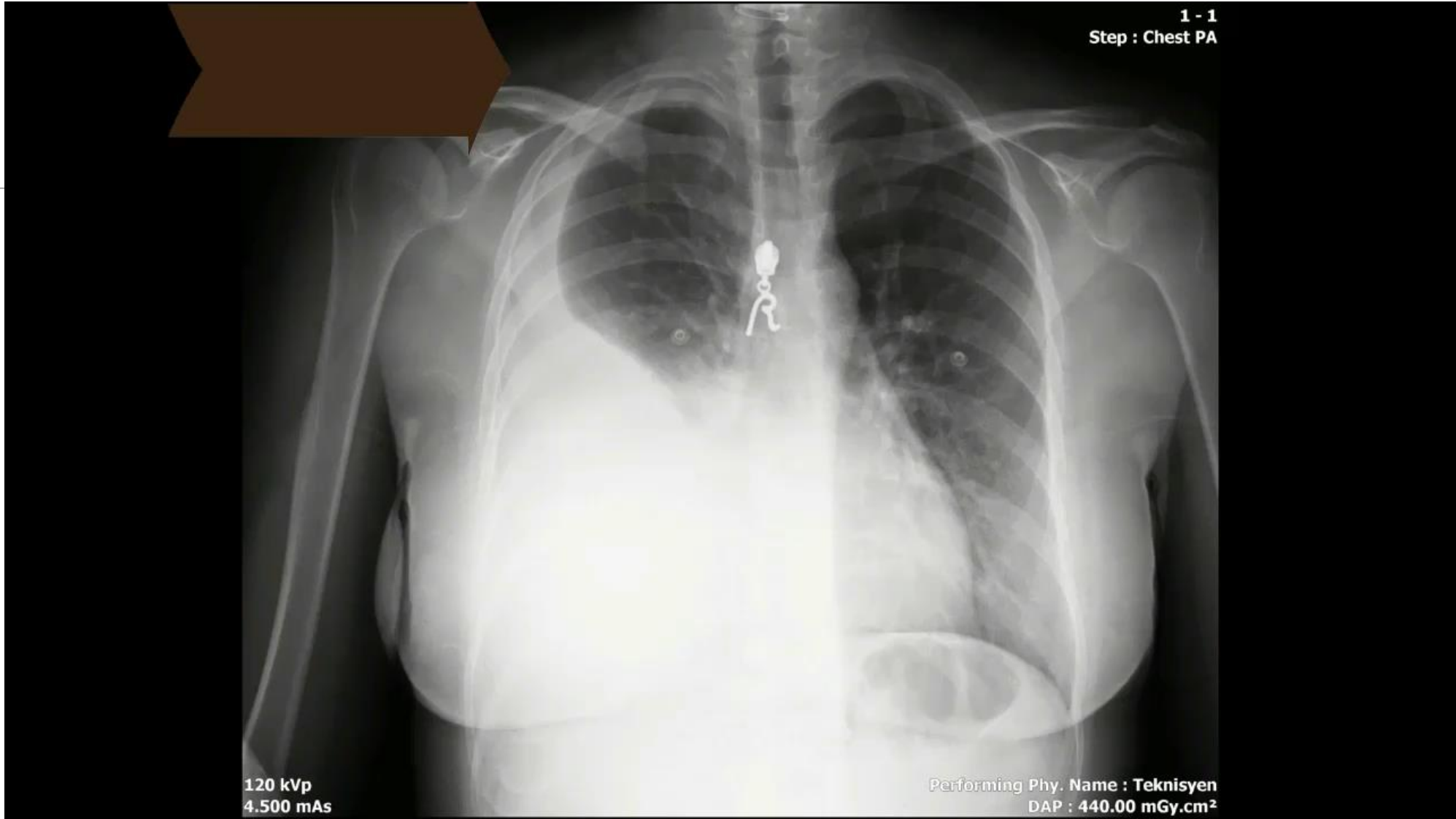


Postop 1.gün: ateş düşüyor. Hasta rahatlıyor, 2.gün dren çekiliyor



Postop 5.gün TABURCU





Mikroskopi :

Histokimyasal Boyama Panel Sonuçları :

İmmunhistokimya Boyama Panel Sonuçları :

Frozen Tanı :

Histopatolojik Tanılar / Sitopatolojik Tanılar : Sağ Paryetal Plevra Rezeksiyonu: Kronik aktif fibröz/ fibrinöz plörit, supuratif iltihap

Postop 2.y



Akciğer Kanseri



Akciğer kanserli hastaların ancak **%15'ine** erken evrede tanı konulabilmektedir.

Evre 1 KHDAK'de ise hastalarının **%65'inin** tedavi olabileceği şansı olabilmektedir.

Bu hastalıkta en iyi tedavi şansı **CERRAHİ** rezeksiyondur.

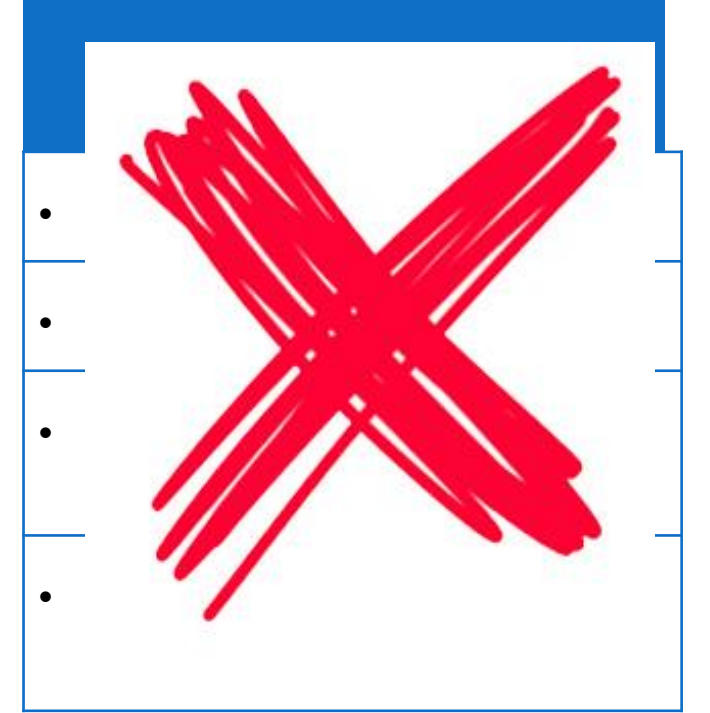


VATS REZEKSİYON



Endikasyonlar

- Erken Evre Akciğer Kanseri
- Tümör Çapı <6 cm
- Benign Hastalıkları (Bül, Sekestrasyon)



VATS Segmentektomi



Tümör çapının 2 cm veya daha küçük olması

Kısıtlı akciğer kapasitesi olan hastalarda (FEV1 beklenenin %50'sinden az olması)

Tümörün anatomik olarak segment rezeksiyonuna uygun olması gerekmektedir.

Lokal Rekürrens?



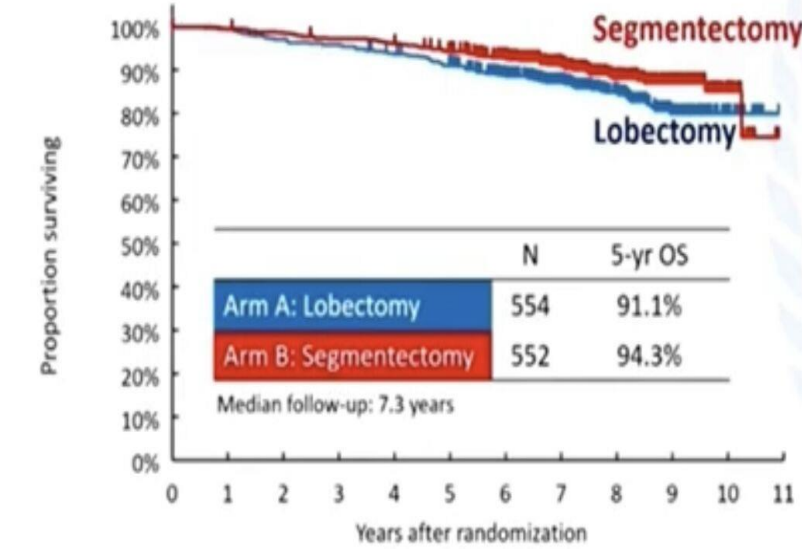
JCOG0802/WJOG4607L



Evre 1a/b Tümörlerde

- Genel sağkalım Segmentektomi > Lobektomi
- Segmentektomi için nodal negatifliğin sağlanması (f/s çalışılması)
- Radikal LN diseksiyonu

Result 1. Overall survival (primary endpoint)



HR: 0.663
95% CI: 0.474–0.927
one-sided

P < 0.0001 for non-inferiority
P = 0.0082 for superiority

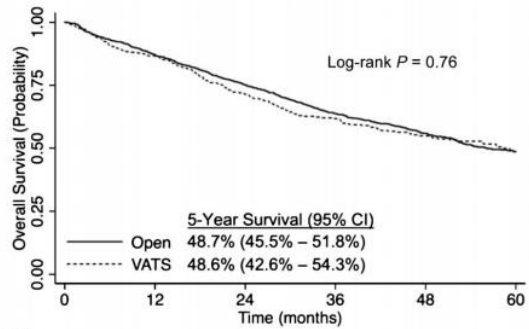
| | No. at Risk | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
|---------------|-------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|
| Lobectomy | 554 | 550 | 537 | 530 | 515 | 495 | 426 | 322 | 190 | 90 | 23 | 0 | |
| Segmentectomy | 552 | 549 | 543 | 534 | 528 | 512 | 457 | 332 | 202 | 104 | 25 | 0 | |

VATS Gerekli Mi?

A National Analysis of Short-term Outcomes and Long-term Survival Following Thoracoscopic Versus Open Lobectomy for Clinical Stage II Non-Small-Cell Lung Cancer

Chi-Fu Jeffrey Yang, MD,[†] Arvind Kumar, BS,* John Z. Deng, BS,[†] Vignesh Raman, MD,*
Natalie S. Lui, MD,[†] Thomas A. D'Amico, MD,* and Mark F. Berry, MD^{†‡}

1559 hasta



VATS vs Torakotomi

- Lenf nodu upstage % 12.0 vs %10.5
p= 0.41

- **30 Gün Mortalite % 2.3 vs %3.1**
p=0.31

5-yıl sağkalım : % 48.6 vs %48.7, p=0.76

HR VATS : 1.08, 95% CI: 0.90–1.30, p=0.39

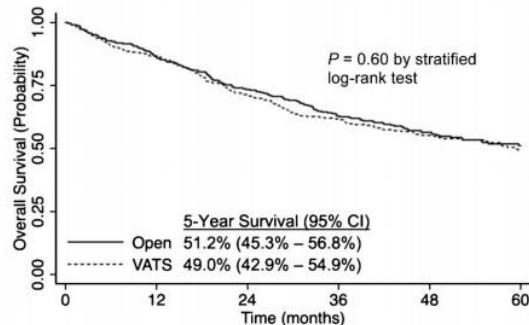


TABLE 5. Open Versus VATS Converted to Open Lobectomy for Patients With cT1-2, N1, M0 NSCLC: Perioperative and Postoperative Data

| Variable | Total Cohort | | | Propensity Score-matched Analysis | | |
|---|--------------------|---------------------------------|-------|-----------------------------------|---------------------------------|------|
| | Open (N = 1,204) | VATS Converted to Open (N = 73) | P | Open (N = 70) | VATS Converted to Open (N = 70) | P |
| Treatment specifics | | | | | | |
| Days to definitive surgery (IQR) | 33 (15,50) | 34 (16,49) | 0.51 | 33.5 (12,57) | 34 (16,49) | 0.93 |
| Days to adjuvant therapy (IQR) | | | | | | |
| Adjuvant radiotherapy* | 111.5 (70.5,176.5) | 93.5 (54.5,184) | 0.49 | 114 (75,186) | 93.5 (54.5,184) | 0.32 |
| Adjuvant chemotherapy [†] | 76 (57,105) | 87 (61,106) | 0.57 | 88 (65.5,117) | 86 (58,107) | 0.87 |
| Adjuvant therapy, n (%) | | | 0.56 | | | 1.00 |
| Adjuvant radiotherapy | 19 (1.6%) | <10 | | 0 (0.0%) | <10 | |
| Adjuvant chemotherapy | 536 (44.5%) | 27 (37.0%) | | 30 (42.9%) | 26 (37.1%) | |
| Adjuvant chemoradiation | 135 (11.2%) | 11 (15.1%) | | 11 (15.7%) | 11 (15.7%) | |
| Surgical endpoints | | | | | | |
| Nodes removed (IQR) | 10 (6,16) | 14 (8,21) | 0.003 | 13 (7,20) | 14 (9,21) | 0.89 |
| Surgical margins, n (%) | | | | | | 0.38 |
| Negative | 1110 (92.2%) | 69 (94.5%) | 0.52 | 64 (91.4%) | 66 (94.3%) | |
| Positive margin-microscopic | 42 (3.5%) | <10 | | <10 | <10 | |
| Positive margin-macroscopic | <10 | 0 (0.0%) | | 0 (0.0%) | 0 (0.0%) | |
| Short-term outcomes | | | | | | |
| 30-d mortality, n (%) | 37 (3.1%) | <10 | 0.62 | <10 | <10 | 1.00 |
| 30-d readmission, n (%) | 71 (5.9%) | <10 | 0.74 | <10 | <10 | 1.00 |
| Hospital length of stay (days, IQR) | 6 (4,9) | 6 (4,9) | 0.95 | 6 (5,9) | 6 (4,9) | 0.55 |
| Tumor characteristics | | | | | | |
| Pathologic T status, n (%) [‡] | | | 0.43 | | | 0.88 |
| T0 (in situ) | <10 | 0 (0.0%) | | 0 (0.0%) | 0 (0.0%) | |
| T1 | 475 (39.5%) | 36 (49.3%) | | 32 (45.7%) | 35 (50.0%) | |
| T2 | 619 (51.4%) | 31 (42.5%) | | 31 (44.2%) | 30 (42.9%) | |
| T3 | 57 (4.7%) | <10 | | <10 | <10 | |
| T4 | 16 (1.3%) | <10 | | <10 | <10 | |
| Pathologic N status, n (%) [§] | | | 0.071 | | | 0.38 |
| N0 | 250 (20.8%) | 14 (19.2%) | | 14 (20.0%) | 13 (18.6%) | |
| N1 | 790 (65.6%) | 44 (60.3%) | | 48 (68.6%) | 42 (60.0%) | |
| N2 | 124 (10.3%) | 14 (19.2%) | | <10 | 14 (20.0%) | |
| N3 | 12 (1.0%) | 0 (0.0%) | | 0 (0.0%) | 0 (0.0%) | |

*Data available for 164 patients from the total cohort, 23 patients in the propensity score-matched analysis.

†Data available for 690 patients from the total cohort, 75 patients in the propensity score-matched analysis.

‡Data available for 1,241 patients from the total cohort, 138 patients in the propensity score-matched analysis.

§Data available for 1,248 patients from the total cohort, 138 patients in the propensity score-matched analysis.

Uniportal VATS?



Uniportal versus multiportal thoracoscopic lobectomy

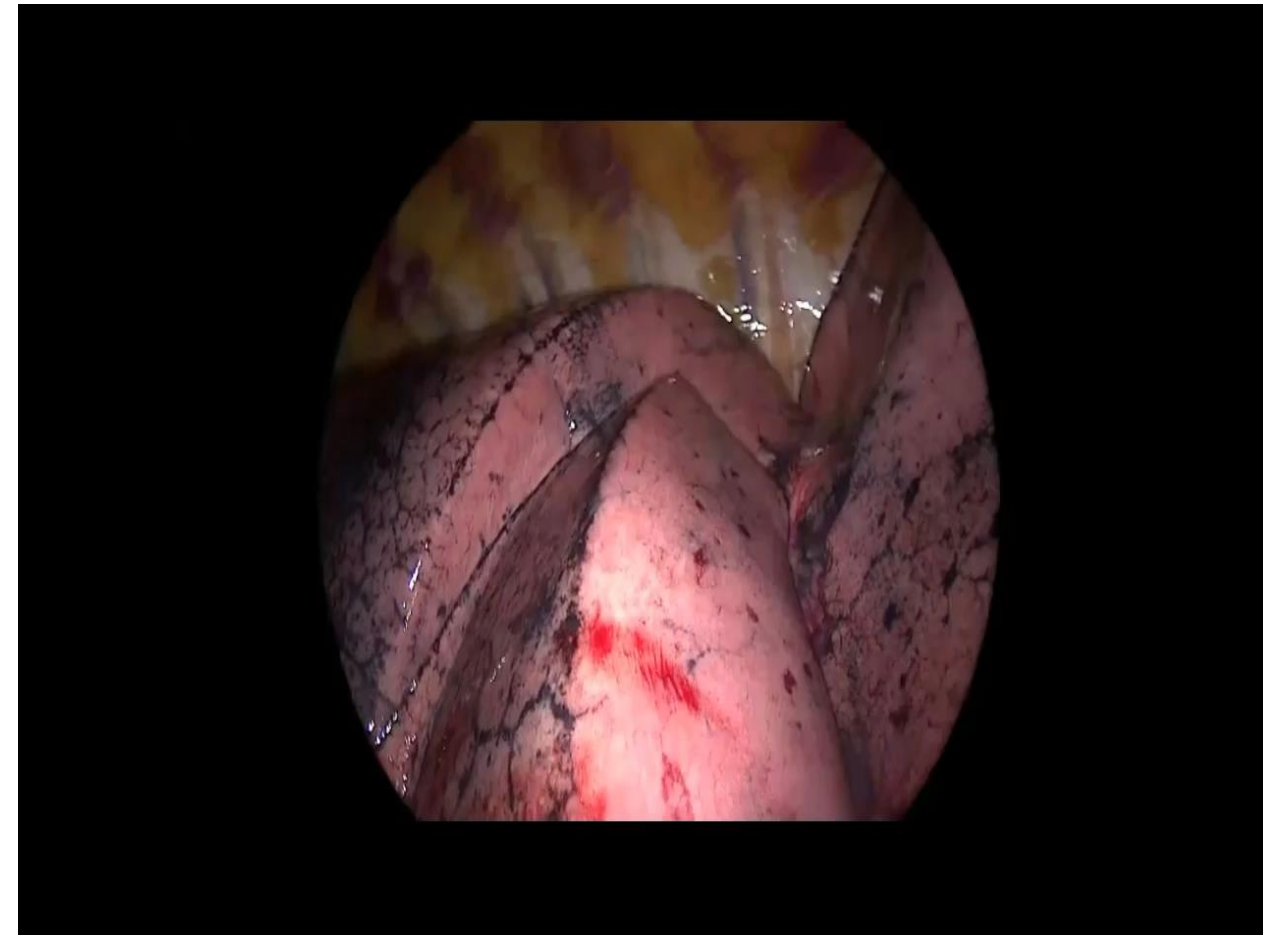
Ergonomic evaluation and perioperative outcomes from a randomized and controlled trial

Jie Yao, MD¹, Zhibo Chang, MD, Lin Zhu, MS, Junqiang Fan, MD*

Surgical and postoperative data.

| Characteristic | UVATS (n=35) | MVATS (n=34) | P value |
|---------------------------------|----------------------|----------------------|---------|
| Surgical time, min | 96.77 ± 24.38 | 95.41 ± 20.11 | .810 |
| Blood loss, mL | 34.14 ± 25.01 | 51.47 ± 40.84 | .048 |
| ICU, d | 0 | 0 | |
| Hospital stay, d | 3.80 ± 0.90 | 4.65 ± 2.33 | .144 |
| Chest tube duration, d | 2.71 ± 0.83 (2–6) | 3.26 ± 1.96 (1–11) | .343 |
| Lymph nodes harvested | 31.97 ± 9.18 (17–53) | 30.50 ± 9.35 (15–56) | .512 |
| Positive lymph nodes (%) | 8 (0.71) | 50 (4.82) | .547 |
| Total drainage in 24hours, mL | 227.94 ± 117.69 | 308.24 ± 145.13 | .018 |
| Conversion rate | 0 | 0 | |
| Mortality | 0 | 0 | |
| Complications (%) | 4 (11.4) | 9 (26.5) | .276 |
| Air leak (>6 days) | 0 | 4 (11.8) | |
| Atrial fibrillation | 0 | 0 | |
| Bleeding | 0 | 0 | |
| Atelectasis | 0 | 0 | |
| Bronchopleural fistula | 0 | 0 | |
| Death | 0 | 0 | |
| Pneumonia | 0 | 0 | |
| Chylothorax | 0 | 1 (2.9) | |
| Reoperation | 0 | 0 | |
| Reinsertion of chest tube | 4 (11.4) | 3 (8.8) | |
| Hoarseness | 0 | 1 (2.9) | |
| Lung function | | | |
| FEV ₁ , L (3 wks) | 1.87 ± 0.42 | 1.89 ± 0.45 | .866 |
| FEV ₁ (%) (3 wks) | 72.39 ± 14.41 | 72.80 ± 13.02 | .901 |
| FEV ₁ , L (3 mo) | 2.11 ± 0.49 | 2.17 ± 0.52 | .659 |
| FEV ₁ (%) (3 months) | 82.20 ± 16.47 | 82.14 ± 14.14 | .988 |

FEV₁ (%) = first second forced expiratory volume accounts for the percentage of FVC (forced vital capacity), FEV₁ (L) = forced expiratory volume in 1 second, ICU = intensive care unit, MVATS = multiple-portal video-assisted thoracoscopic surgery, UVATS = uniportal video-assisted thoracoscopic surgery.





Ne Kadar Agresif Olmalıyız?

- Onkolojik cerrahideki ana prensip R0 rezeksiyon gerçekleştirirken; parankim koruyucu cerrahi yapmaktır.
- Pnöminektomi gibi mortalite ve morbidite oranı yüksek rezeksiyonlardan olabildiğince kaçınmak gereklidir.

Original Article

Sleeve lobectomy compared with pneumonectomy for operable centrally located non-small cell lung cancer: a meta-analysis

Zhengjun Li¹, Wei Chen², Mozhu Xia³, Hongxu Liu², Yongyu Liu¹, Ilhan Inci⁴, Fabio Davoli⁵, Ryuichi Waseda⁶, Pier Luigi Filosso⁷, Abby White⁸

| Variables | No. of studies furnishing data | Results, % | | OR (95% CI) | P value | I ² , % |
|--|---|------------|-------|------------------|----------|--------------------|
| | | SL | PN | | | |
| Operative mortality | 13 (8,10,11,17-19,23-28,30) | 2.62 | 6.30 | 0.40 (0.25–0.63) | <0.0001 | 0 |
| 30-day mortality | 12 (14,16,20-22,29,32-36) | 2.78 | 5.86 | 0.55 (0.32–0.96) | 0.04 | 55 |
| Local recurrence | 15 (8,10,13,16,17,19,21,25,27,28,30-34) | 15.65 | 22.81 | 1.09 (0.72–1.64) | 0.69 | 50 |
| Distant recurrence | 9 (10,21,27,28,30-34) | 19.81 | 30.64 | 0.61 (0.45–0.82) | 0.001 | 0 |
| Complication | 15 (10,13,14,16-21,24,28,29,31-33) | 29.39 | 30.58 | 1.07 (0.87–1.31) | 0.55 | 27 |
| Overall survival | | | | | | |
| 1-year | 8 (11,14,15,20,21,28,29,35) | 38.00 | 18.26 | 1.53 (1.31–1.80) | <0.00001 | 4 |
| 3-year | 11 (11,13,17,20,21,27-30,32,35) | 27.80 | 10.95 | 1.78 (1.47–2.17) | <0.00001 | 30 |
| 5-year | 20 (8,11,13,14,16-22,25-29,32-35) | 25.77 | 7.34 | 1.96 (1.70–2.27) | <0.00001 | 43 |
| Subgroup overall survival (N0, N1 and N2 patients) | | | | | | |
| 3-year (N2 patients) | 3 (13,17,22) | 29.78 | 19.51 | 1.12 (0.47–2.68) | 0.79 | 35 |
| 5-year (N2 patients) | 3 (8,13,18) | 19.77 | 18.69 | 1.27 (0.65–2.45) | 0.48 | 44 |
| 5-year (N0 and N1 patients) | 5 (8,13,17,18,22) | 57.77 | 37.29 | 2.14 (1.66–2.78) | <0.00001 | 13 |



VATS Sleeve Rezeksiyon

World J Surg
https://doi.org/10.1007/s00268-020-05877-5



SCIENTIFIC REVIEW

Video-Assisted Thoracoscopic Sleeve Lobectomy for Centrally Located Non-small Cell Lung Cancer: A Meta-analysis

Han-Yu Deng¹ · Xiao-Ming Qiu¹ · Da-Xing Zhu¹ · Xiaojun Tang¹ · Qinghua Zhou¹

Table 2 Main outcomes extracted from the studies included in our meta-analysis

| Studies | Blood loss (ml) | | Number of lymph node dissected | | Operation time (minute) | | Postoperative hospital stay (day) | | Complication rate ^a | | 3-year OS rate ^b | | 3-year PFS rate ^c | |
|---------|-----------------|---------------|--------------------------------|-------------|-------------------------|--------------|-----------------------------------|------------|--------------------------------|------------|-----------------------------|------------|------------------------------|------------|
| | VATS group | Open group | VATS group | Open group | VATS group | Open group | VATS group | Open group | VATS group | Open group | VATS group | Open group | VATS group | Open group |
| [11] | 133.3 ± 74.1 | 179.2 ± 101.9 | 12.3 ± 4.8 | 12.6 ± 3.8 | 198.8 ± 58.3 | 197.5 ± 59.3 | 6 ± 1.5 | 7 ± 1.5 | 5/67 | 12/104 | 49/23 | 76/40 | 44/28 | 62/54 |
| [9] | 227.7 ± 158.9 | 246.4 ± 79.9 | 21.3 ± 6.8 | 21.5 ± 11.5 | 300.3 ± 71.7 | 221 ± 48.7 | 9.2 ± 3.5 | 11.3 ± 7.2 | NA | NA | 31/8 | 26/13 | 23/16 | 19/20 |
| [10] | 182.5 ± 134.6 | 222.2 ± 130.4 | 22.9 ± 8.3 | 22.9 ± 9.9 | 291.5 ± 87.2 | 240 ± 47.8 | NA | NA | 10/28 | 11/28 | 25/13 | 23/26 | 25/13 | 21/18 |
| [8] | 166.7 ± 74.1 | 200 ± 222.2 | 10 ± 3.7 | 10.3 ± 5.2 | 240 ± 88.9 | 180 ± 88.9 | 5.7 ± 2.2 | 6.3 ± 2.2 | 3/18 | 1/20 | 20/1 | 20/1 | 11/10 | 12/9 |
| [7] | 406 ± 200 | 318 ± 198 | 25.7 ± 6.5 | 22 ± 8.3 | 226 ± 37 | 166 ± 40 | 11.6 ± 2.8 | 16.1 ± 4.9 | 1/9 | 10/31 | 7/3 | 26/15 | NA | NA |

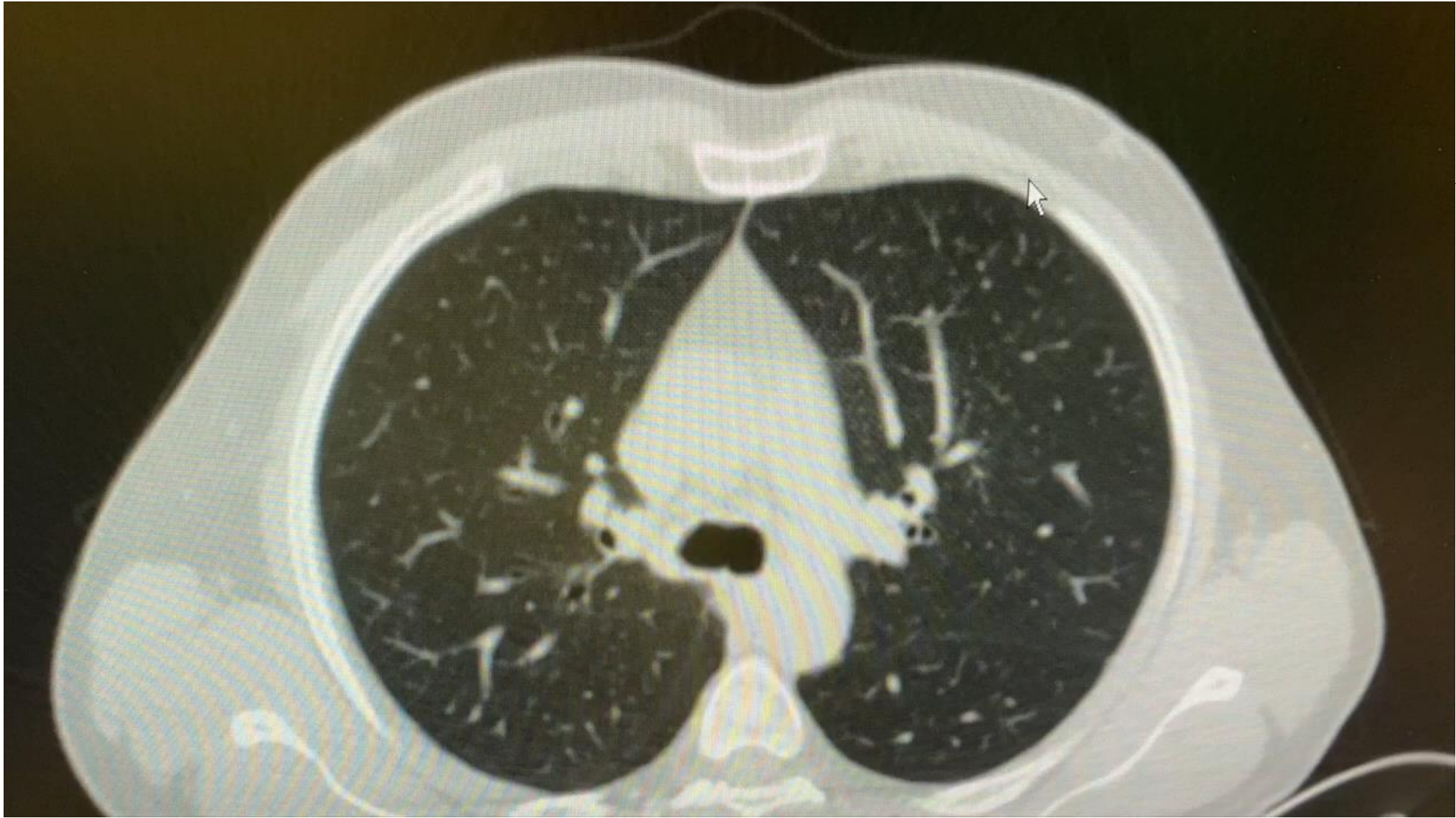
OS overall survival; PFS progression-free survival; VATS video-assisted thoracoscopic surgery; NA not available

^aExpressed as no. with complication/no. without complication;

^bExpressed as no. alive/no. death;

^cExpressed as no. progression-free/no. other conditions





Pnöminektomi

İlk 30 günde mortaliteyi %5.7

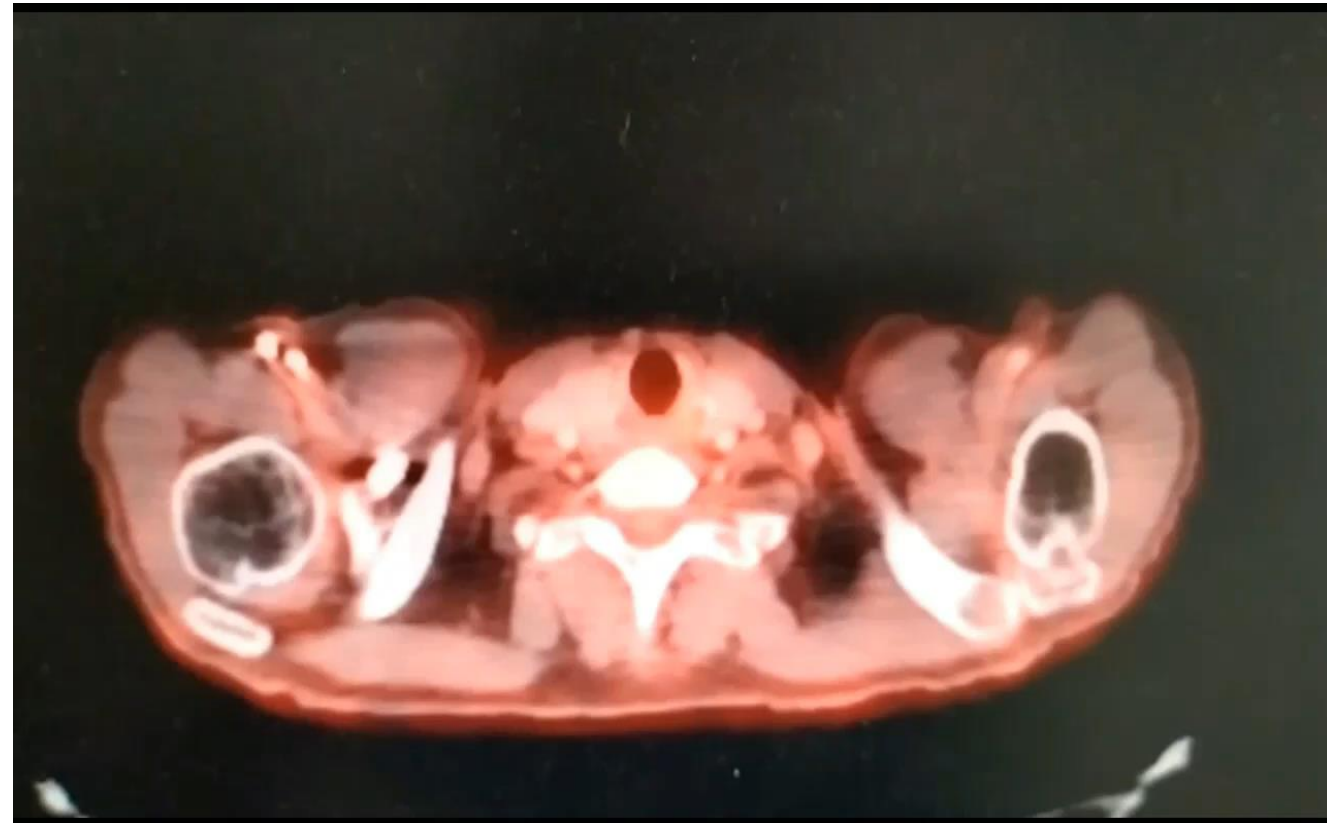
Komplikasyon oranını ise %33

Mortalite Riskinin


- >65 Yaş
- İndüksiyon tedavisi
- ASA skorunun >3
- Sağ Rezeksiyon
- Ekstended akciğer rezeksiyonu

Pneumonectomy for lung cancer: Contemporary national early morbidity and mortality outcomes

Pascal A. Thomas, MD, FECTS,^a Julie Berbis, MD,^b Jean-Marc Baste, MD,^c
Françoise Le Pimpec-Barthes, MD,^d François Tronc, MD,^e Pierre-Emmanuel Falcoz, MD,^f



Subxiphoid uniportal thoracoscopic pulmonary segmentectomy for stage I non-small cell lung cancer: Feasibility, quality of life and financial worthiness

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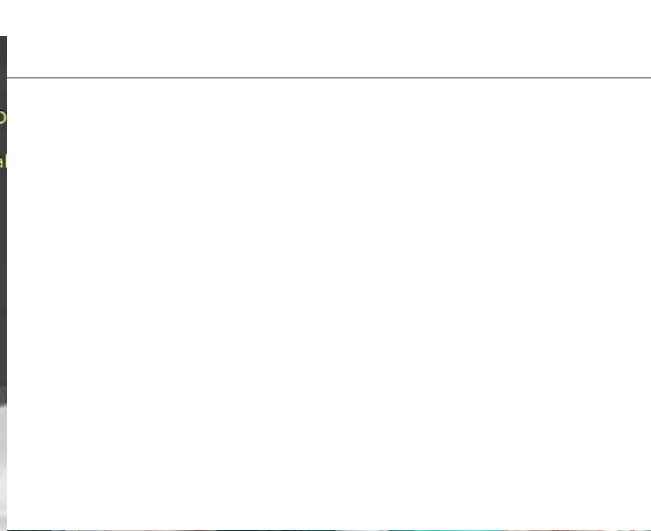
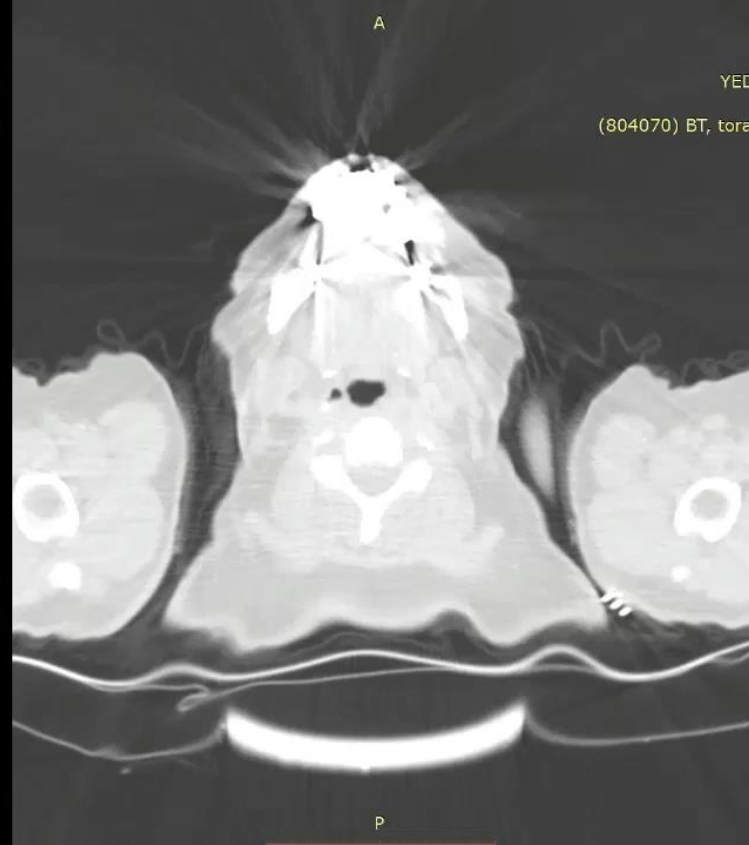
⁴ Department of Anesthesiology, Shanghai Pulmonary Hospital, Tongji University School of Medicine, Shanghai, China



Table 4 Postoperative pain scoring, quality of life, hospital cost

| | Intercostal (mean ± SD) | Subxiphoid (mean ± SD) | P-value |
|-------------------------------------|------------------------------|------------------------|---------|
| Postoperative pain scoring | | | |
| Postoperative pain (POD) zero | 4.51 ± 0.88 | 3.29 ± 1.14 | <0.001 |
| Postoperative pain (POD) 1 | 4.25 ± 0.61 | 2.68 ± 0.80 | <0.001 |
| Postoperative pain (POD) 3 | 2.1 ± 0.4 | 1.5 ± 1.01 | <0.001 |
| Postoperative pain before discharge | 1.8 ± 0.36 | 0.94 ± 0.7 | <0.001 |
| Quality of life score | | | |
| Quality of life after three months | 68.10 ± 2.55 | 66.49 ± 2 | <0.001 |
| Quality of life after six months | 64.86 ± 2.21 | 63.17 ± 1.53 | <0.001 |
| Quality of life after one year | 60.95 ± 1.36 | 60.22 ± 0.71 | <0.001 |
| Cost (expressed in RMB) | | | |
| Cost, median (min-max) | 45 277 (35 967.69–66 711.48) | 51 535 (34 535–61 100) | <0.001 |

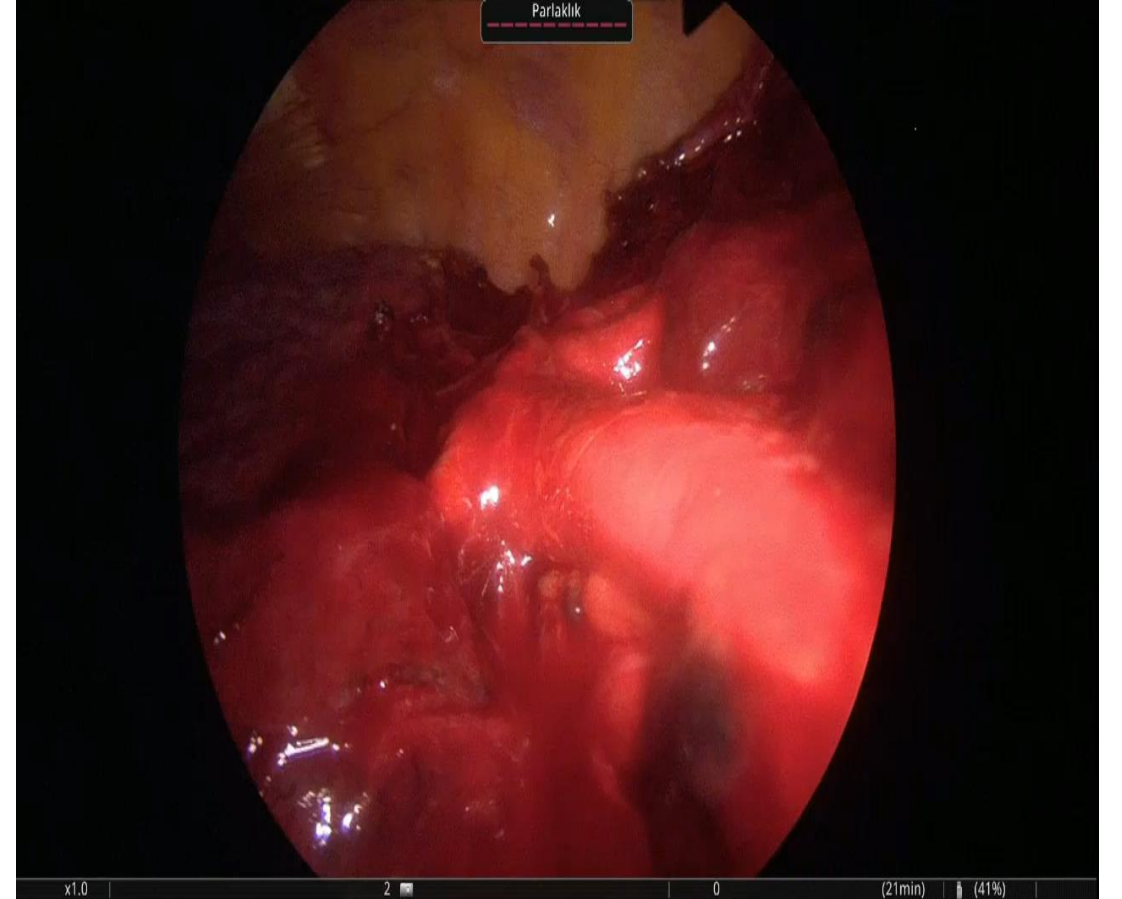
Subksifoid Yaklaşım



Uniportal Yaklaşımın Dezavantajı



- ✓ Öğrenim Zorluğu
- ✓ Özelleştirilmiş Aletlerin Gerekliliği
- ✓ Teknik Olarak Zor
- ✓ Aletlerin Sıkışması «Twister»
- ✓ Doğru Stapler Açılarını Bulmakta Zorluk





Trakea Cerrahisi

56 Yaş / Kadın

Komorbidite

- Yok

COVID sonrasında

uzamış entübasyon



HİPERHİDROZİS/Sempatektomi

Original Article | Published: 21 September 2019

Is there any relationship between quality of life and the level of sympathectomy in primary palmar hyperhidrosis? Single-center experience

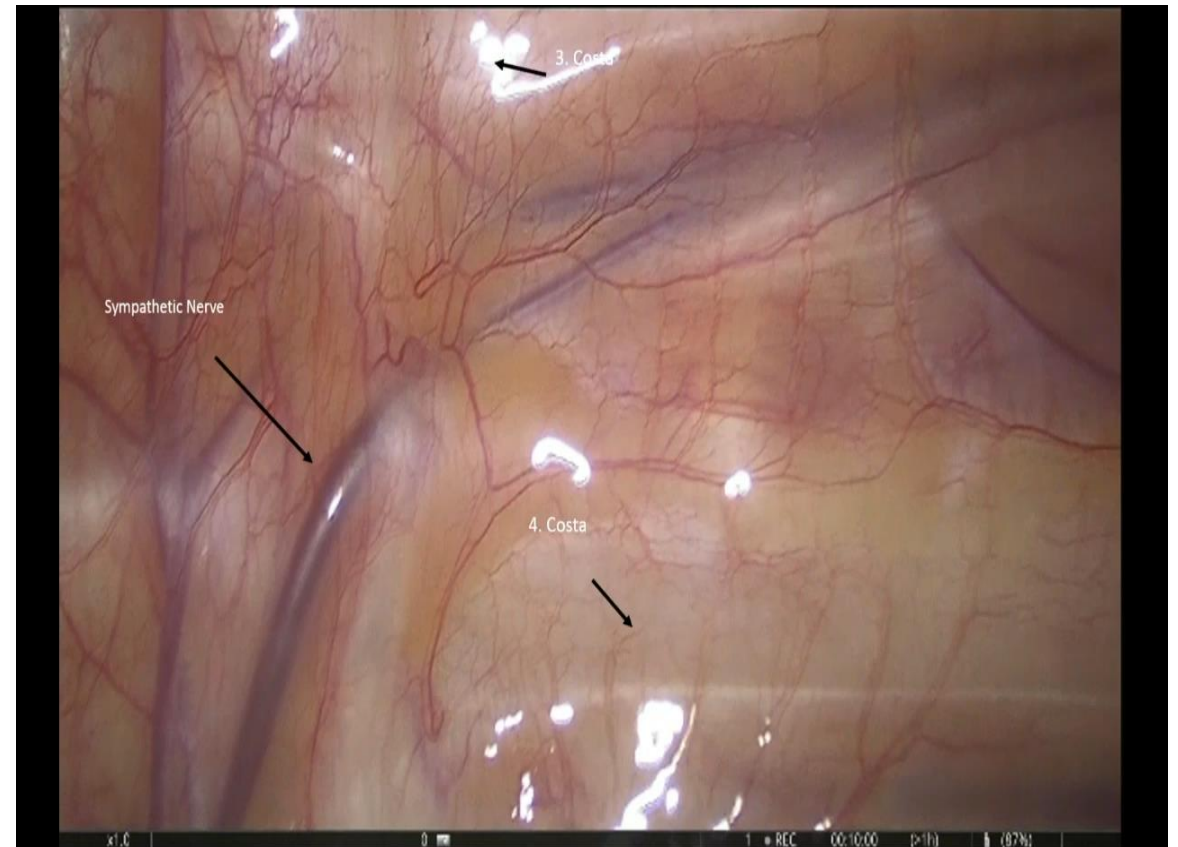
Mustafa Vedat Dogru , Celal Bugra Sezen, Oguz Girgin, Levent Cansever, Celalettin Ibrahim Kocaturk, Muzaffer Metin & Seyyit Ibrahim Dincer

General Thoracic and Cardiovascular Surgery 68, 273–279 (2020) | [Cite this article](#)

239 Accesses | 6 Citations | [Metrics](#)

Table 3 Comparison of postoperative quality of life and surgical level

| Variables | T2–4 [n (%)] | T3–4 [n (%)] | T3 [n (%)] | p value |
|--------------------------------------|--------------|--------------|------------|---------|
| <i>Postoperative quality of life</i> | | | | |
| Very low | 3 (100) | 0 | 0 | <0.001 |
| Low | 5 (83.3) | 1 (16.7) | 0 | |
| Fair | 17 (60.7) | 3 (10.7) | 8 (28.6) | |
| High | 13 (52) | 10 (40) | 2 (8) | |
| Very high | 24 (23.3) | 32 (31.1) | 47 (45.6) | |

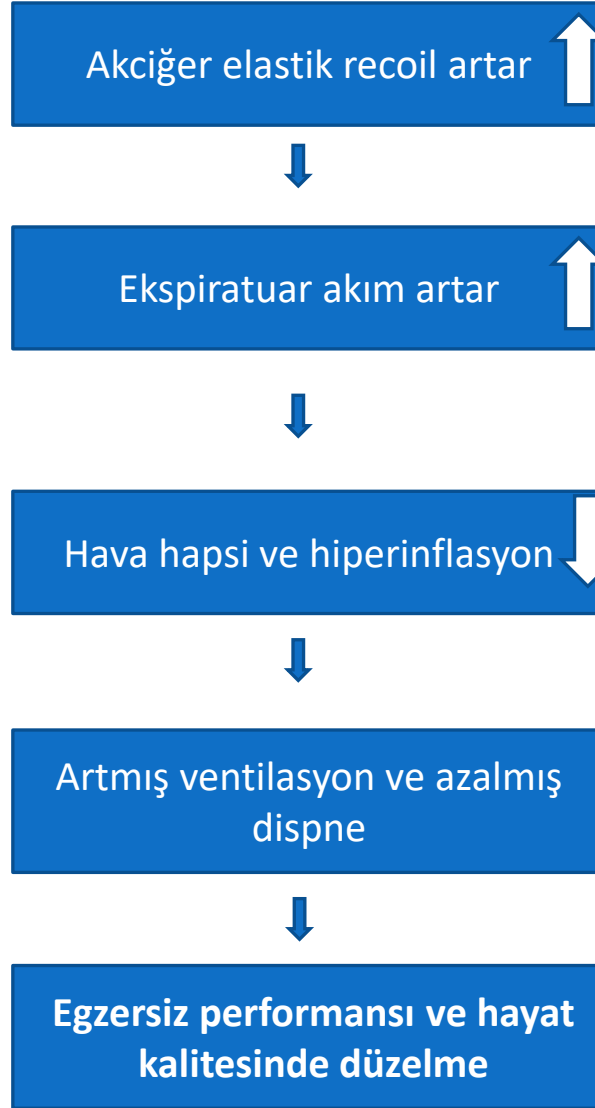


LVRS AMAÇ?

Terminal Hava Yolu
Distalinde Anormal
Genişleme



Fibrozis olmadan
alveoler destruksiyon



GOLD REHBERİ 2020

IYI ADAY

Fiziksel durum

<75 yaş
Sigara bırakma >6 ay
Prednizolon<10 mg/gün
Yandaş hastalık yok
İyi nütrisyonel durum
İyi motivasyon

Radyoloji

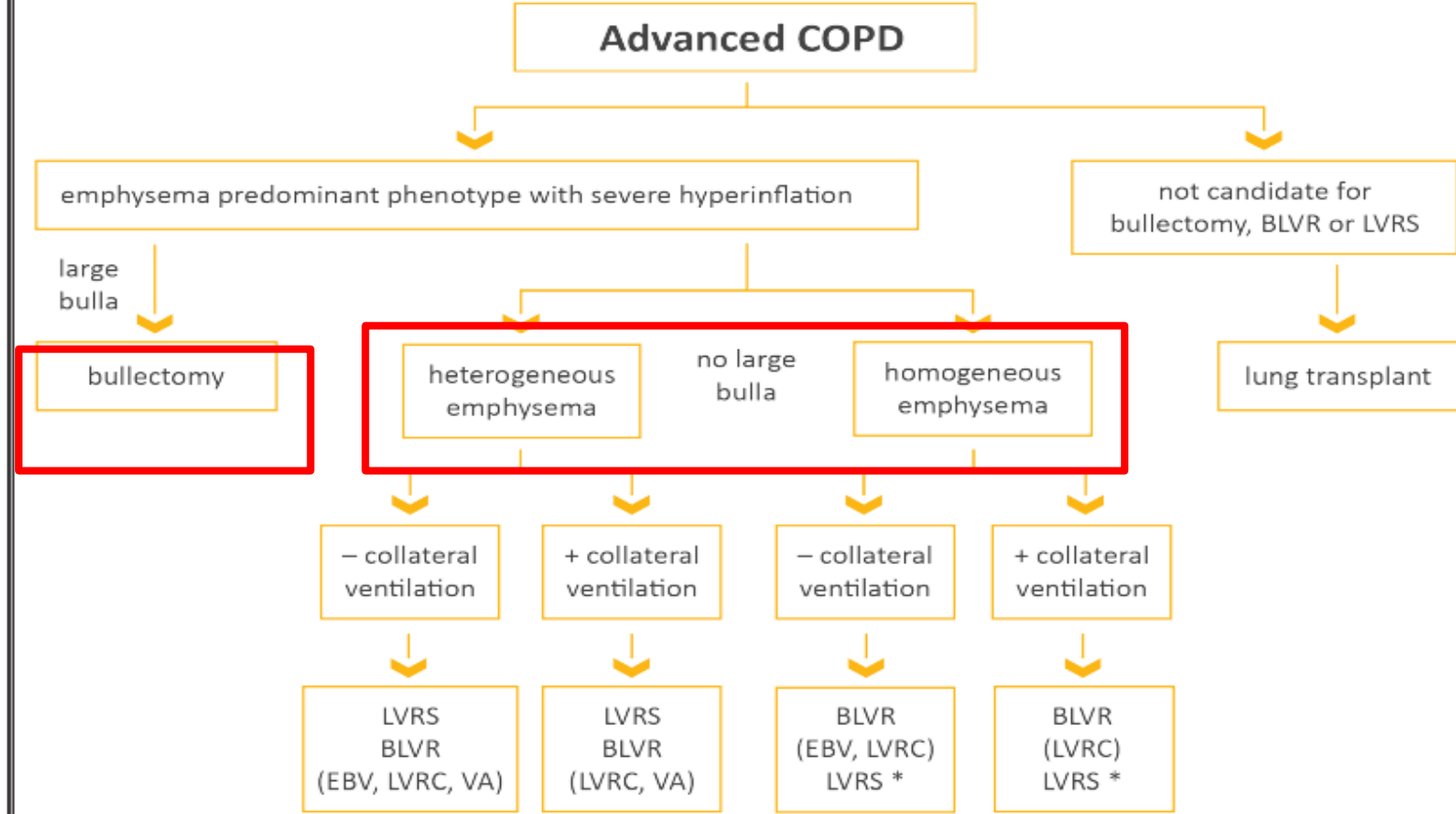
X-ray de hiperinflasyon
Heterojen amfizem
Üst lob baskın amfizem

Fonksiyon durum

FEV1<%40
TLC>%120
RV>%150
DLCO>%20
6 DYT >140 m

INTERVENTIONAL BRONCHOSCOPIC AND SURGICAL TREATMENTS FOR COPD

Overview of various therapies used to treat patients with COPD and emphysema worldwide. Note that all therapies are not approved for clinical care in all countries. Additionally, the effects of BLVR on survival or other long term outcomes or comparison to LVRS are unknown.

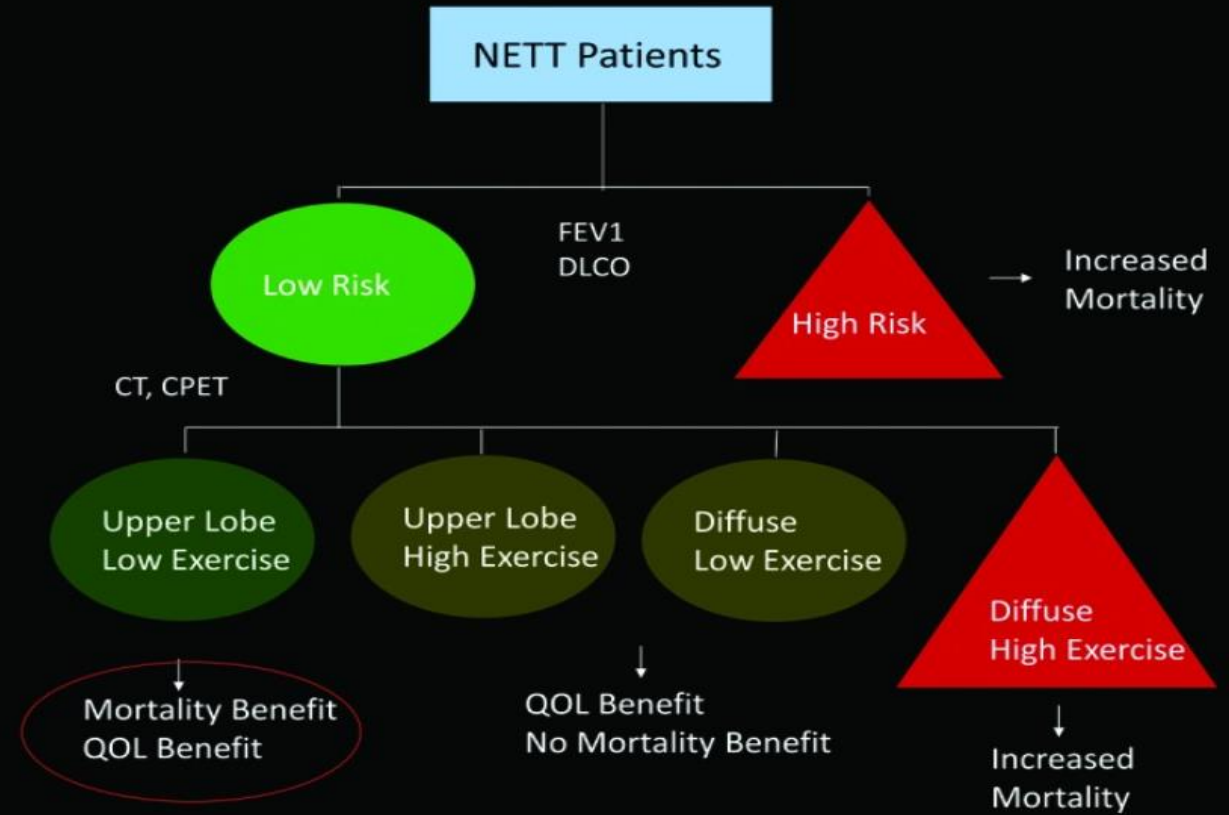
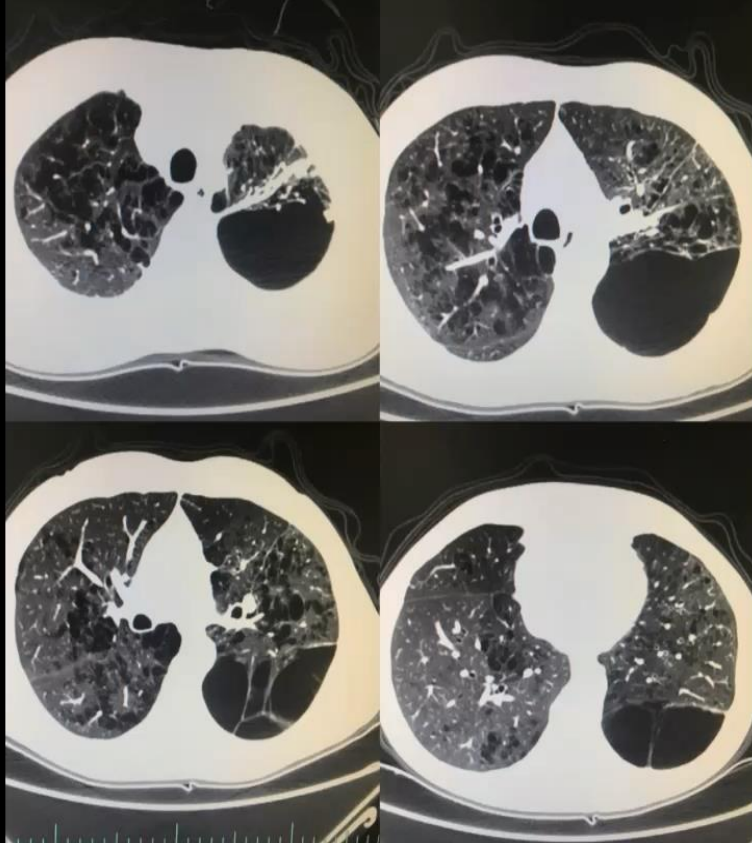


Definition of Abbreviations: BLVR, Bronchoscopic Lung Volume Reduction, EBV, endobronchial Valve, LVRS, Lung volume reduction surgery, LVRC, Lung volume reduction coil, VA, Vapor ablation

*at some but not all centers

FIGURE 4.6

Heterojen Amfizem

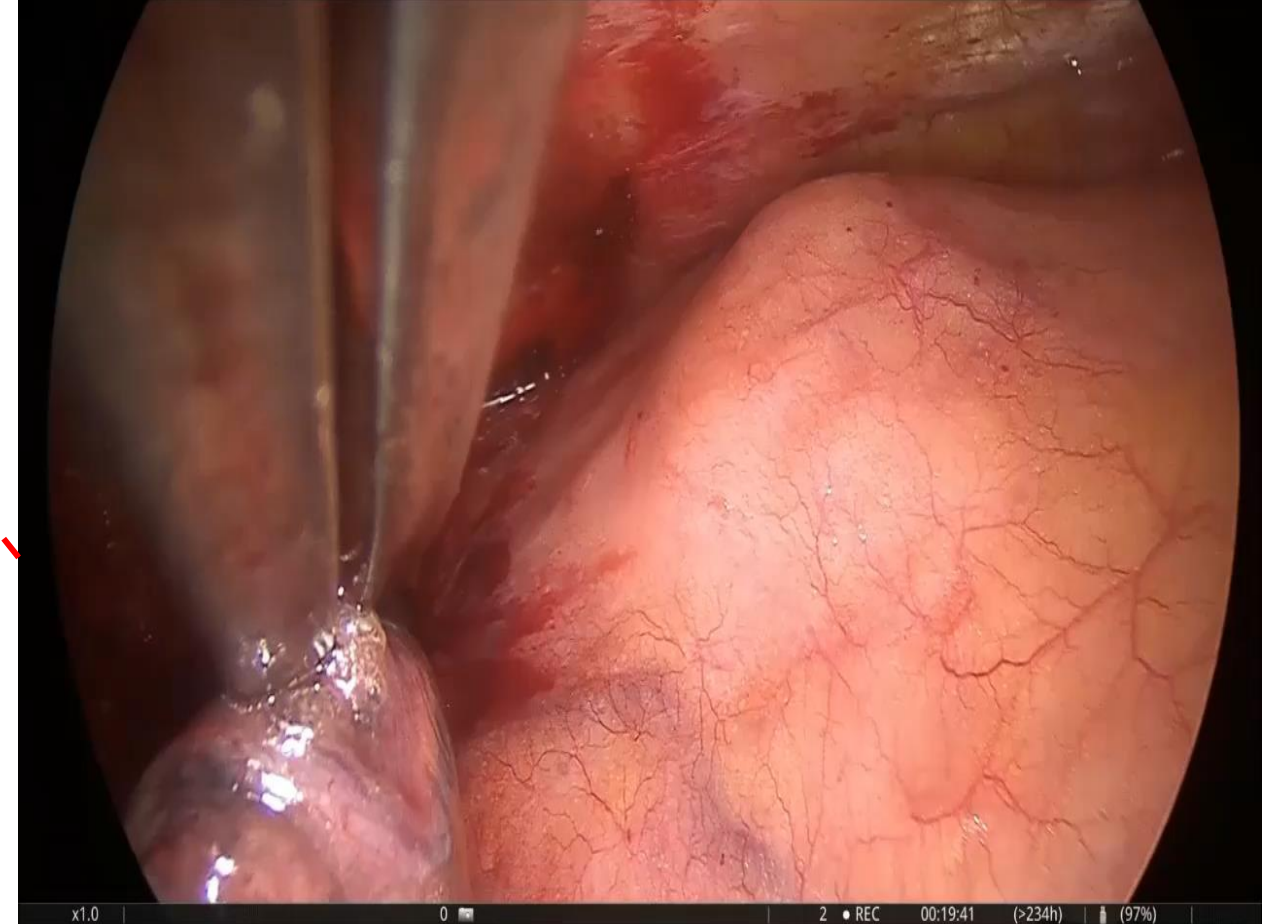
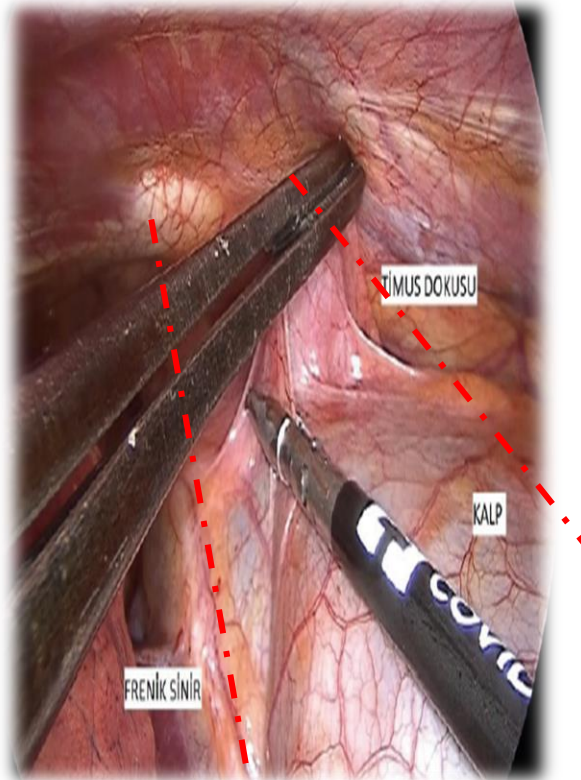




Anterior Mediasten Cerrahisi

➤ Hazırlık

- M. Gravis Hastalığı hakkında bilgi
- Cerrah-Nöroloji-Anestezi iş birliği



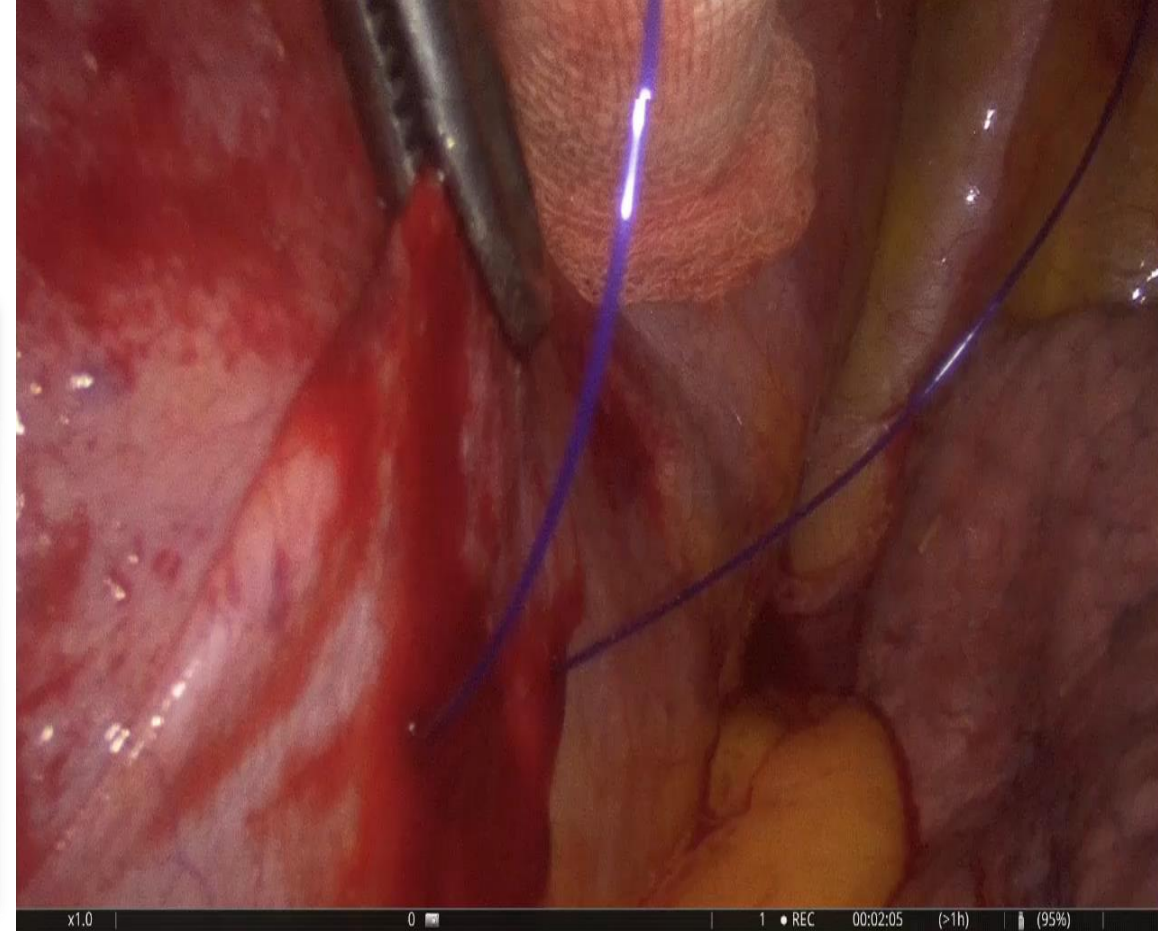
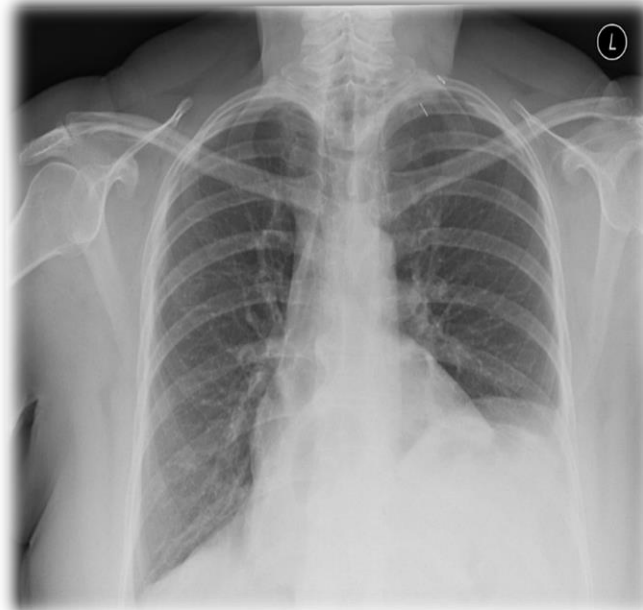
Standard Terms, Definitions, and Policies
for Minimally Invasive Resection of Thymoma

Diaphragma Eventrasyonları

Frenik sinir paralizisi durumlarında (travmatik, cerrahiye sekonder) diafragma eventrasyonu gelişmektedir.

Amaç

- Atelektazi, lobar konsolidasyon gibi problemler düzeltmek
- Solunum kapasitesi arttırılmaktadır.



Yeni Teknolojiler



Akıllı Robot Teknolojisi RATS



Cerrah Destekli Robotik Cerrahi



Surgeon-Powered Robotics in Thoracic Surgery; An Era of Surgical Innovation and Its Benefits for the Patient and Beyond

Jason Trevis^{†}, Nicholas Chilvers[†], Kathrin Freystaetter and Joel Dunning*

Department of Cardiothoracic Surgery, James Cook University Hospital, Middlesbrough, United Kingdom

VATS + RATS



Cerrah Destekli
Robotik Cerrahi

Benefits

Lead surgeon at the bedside

Surgeons performs the key steps
e.g., stapling

Increased tactile feedback

Greater precision

More cost effective

Less training time required

Quicker procedures with increased
flexibility

Challenges

Combination of VATS and robotic
techniques

Resistance of the chest wall in the port
due to VATS style pivot point

Camera technology
development/advancement

Operator experiences the fulcrum effect

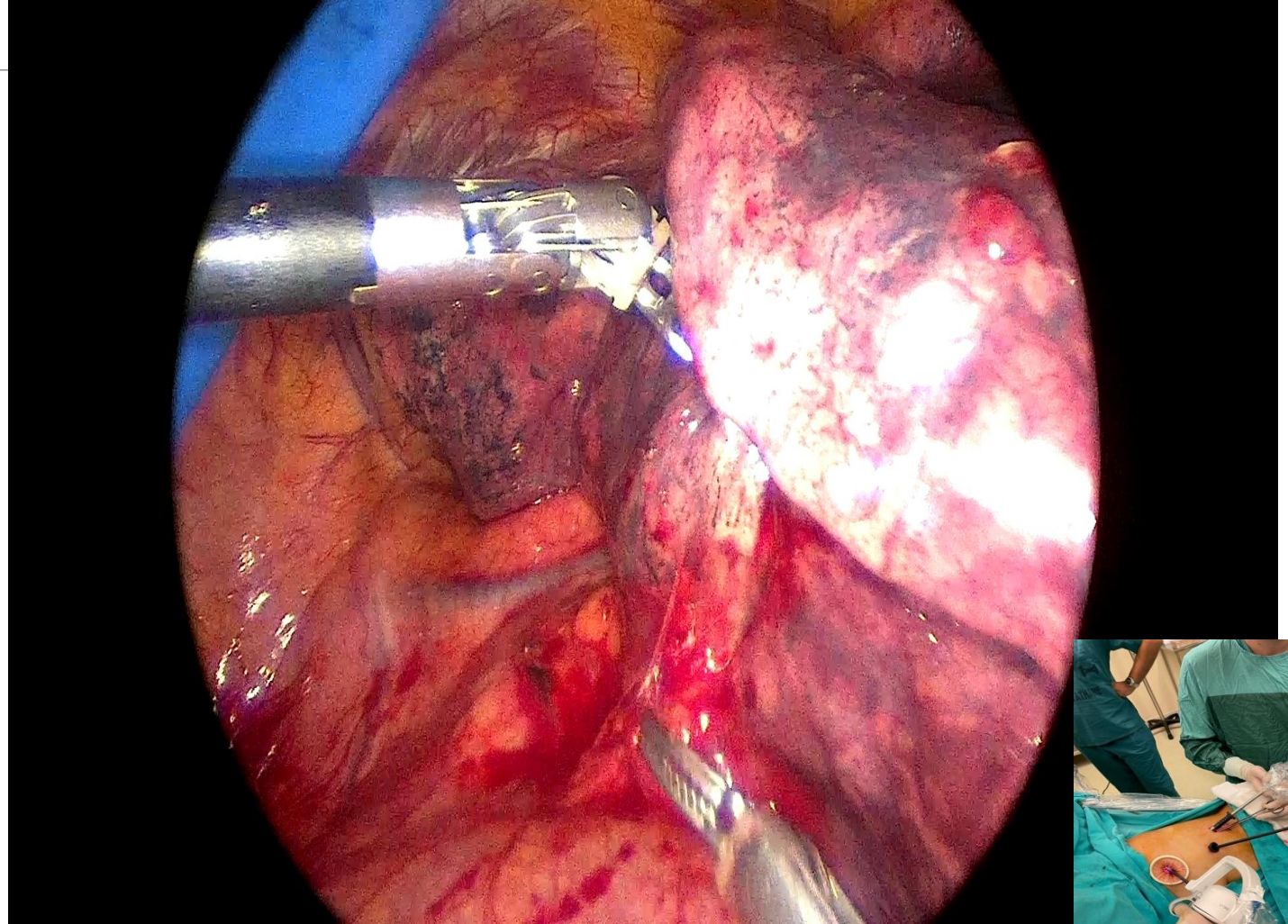
Cerrah Destekli Robotik Cerrahi

60 Yaş / Kadın

Komorbidite

- Koroner Arter Hastalığı
(Stent)
- SVO Öyküsü
- MS nedeniyle Takipli

TTIABX : KHDAK



Uniportal SpRS

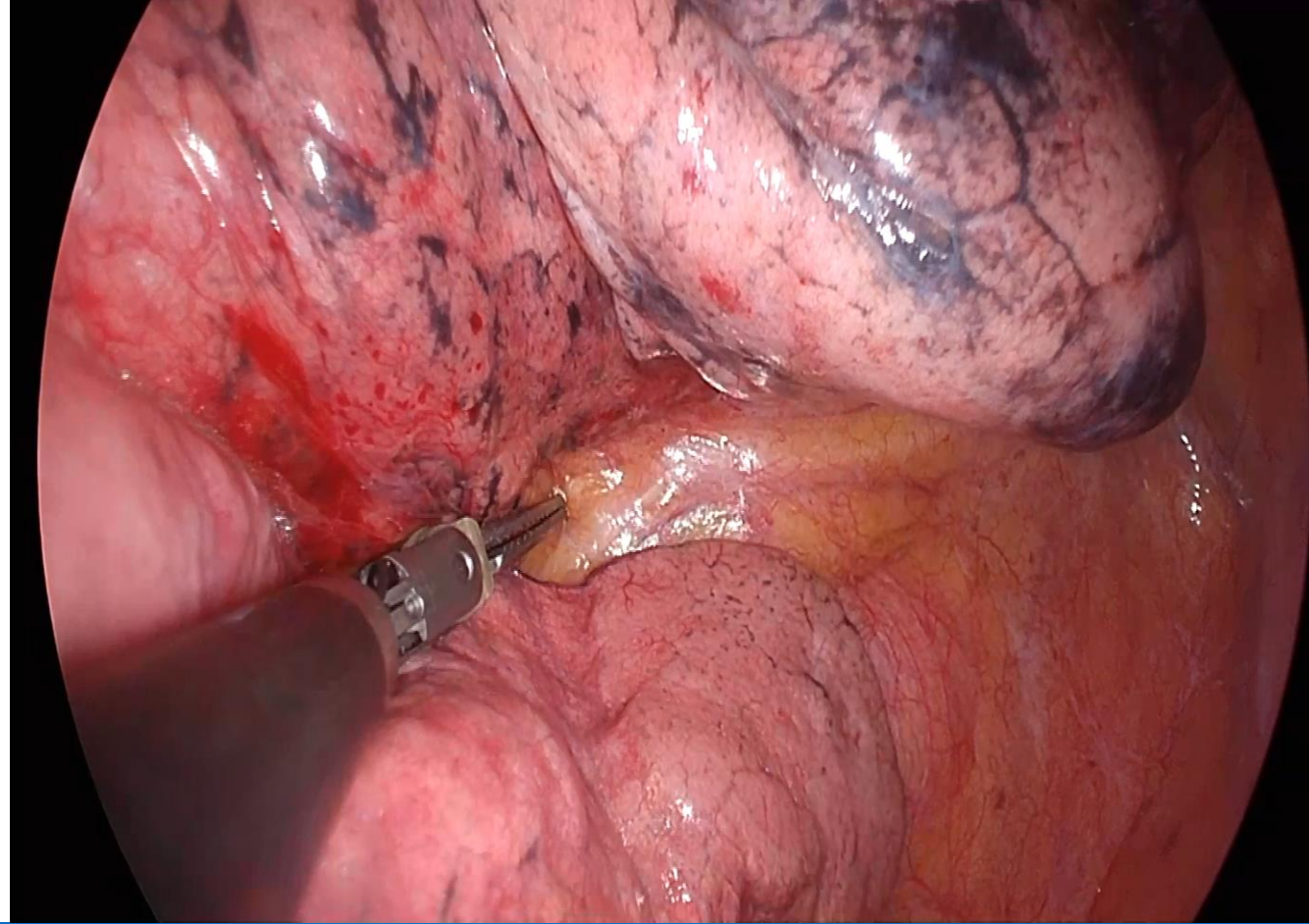
76 Yaş / Erkek

Sağ akciğer üst lobta takibli nodul

Toraks Bt: mm. Boyutlarında kitle

Pet-Bt: Kitlede Suvmax: 15 tutulum mevcut

TTIABx sonucu: KHDAK



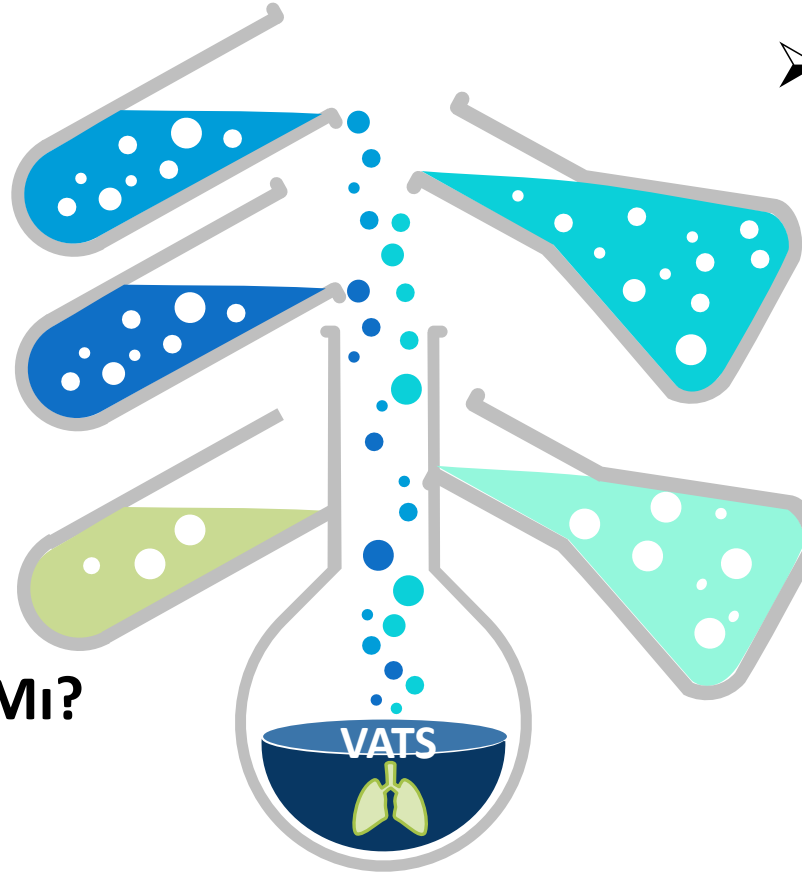
VATS Eğitimi ?



➤ Kaç Rezeksiyon Gerekli?

➤ Uniportal Başlanmalı Mı?

➤ Asistan Düzeyinde Yapılır Mı?



➤ Mentor Bir Hocaya

İhtiyaç Var Mı?

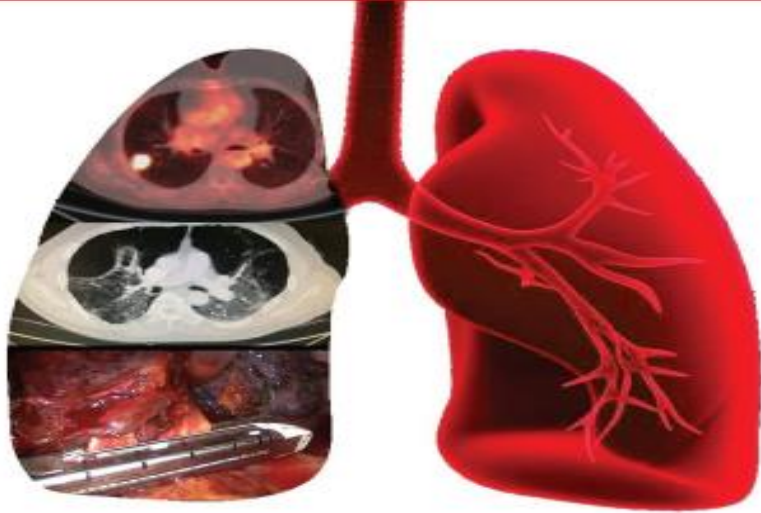
➤ Kaç Port ile Başlanmalı?

Editör | Editor
Prof. Dr. Mehmet KARADAĞ

MINİMAL İNVAZİV GÖĞÜS CERRAHİSİ

MINIMALLY INVASIVE THORACIC SURGERY

Konuk Editörler | Guest Editors
Prof. Dr. Muzaffer METİN, Uzm. Dr. Celal Buğra SEZEN



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Uniportal video-assisted thoracic surgery lobectomy: a consensus report from the Uniportal VATS Interest Group (UVIG) of the European Society of Thoracic Surgeons (ESTS)

Luca Bertolaccini ^{a,*}, Hasan Batirel^b, Alessandro Brunelli^c, Diego Gonzalez-Rivas^d, Mahmoud Ismail^e, Antonio Martin Ucar^f, Calvin S.H. Ng ^g, Marco Scarci^h, Alan D.L. Sihoe ^{ij}, Paula A. Ugalde ^k, Firas Abu Akar ^{lm}, Benedetta Bedetti ⁿ, Sergio Bolufer Nadal^o, Jury Brandolini^a, Pierfilippo Crucitti ^p, Attila Enyedi^q, Hiran C. Fernando ^r, Jozsef Furak^s, Javier Gallego-Poveda^t, Carlos Galvez-Munos^u, Ivo Hanke^v, Miroslav Janik ^w, Peter Juhos ^w, Lidia Libretti ^h, Paolo Lucciarini^x, Paolo Macri^y, Stefano Margaritora^z, Hamid Reza Mahoozi^{aa}, Dania Nachira ^z, Alessandro Pardolesi ^{bb}, Vadim Pischik^{cc}, Dariusz Sagan ^{dd}, Hermien Schreurs^{ee}, Dmitrii Sekhniaidze^{ff}, Davide Tosi^{gg}, Akif Turna ^{hh}, Fernando Vannucci ⁱⁱ, Marcin Zielinski^{jj} and Gaetano Rocco^{kk}, on behalf of the Uniportal VATS Interest Group (UVIG) of the European Society of Thoracic Surgeons (ESTS)

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^c Department of Thoracic Surgery, St. James's University Hospital, Leeds, UK

^d Minimally Invasive Thoracic Surgery Unit (UCTMI), Department of Thoracic Surgery, Coruña University Hospital, Coruña, Spain

^e Department of Surgery, Competence Center of Thoracic Surgery, Charité – Universitätsmedizin Berlin, Berlin, Germany

^f Thoracic Surgery Units, Sheffield Teaching Hospital, Sheffield, UK

Table 4: Summary of responses regarding UniVATS lobectomy training

| How many UniVATS procedures are mandatory to overwhelm the learning curve? | N (%) |
|--|---------|
| 25 | 5 (16) |
| 50 | 22 (71) |
| 75 | 3 (10) |
| >100 | 1 (3) |
| Minimum resident case volume defining a training centre | |
| 30 cases per year | 11 (35) |
| >50 cases per year | 20 (65) |
| UniVATS procedures performed by a surgeon to maintain the UniVATS lobectomy operative skills | |
| 20 cases per year | 11 (35) |
| 40 cases per year | 18 (58) |
| ≥60 cases per year | 2 (6) |
| Should a surgeon be proctored before commencing a UniVATS lobectomy programme? | |
| Yes | 28 (90) |
| No | 3 (10) |

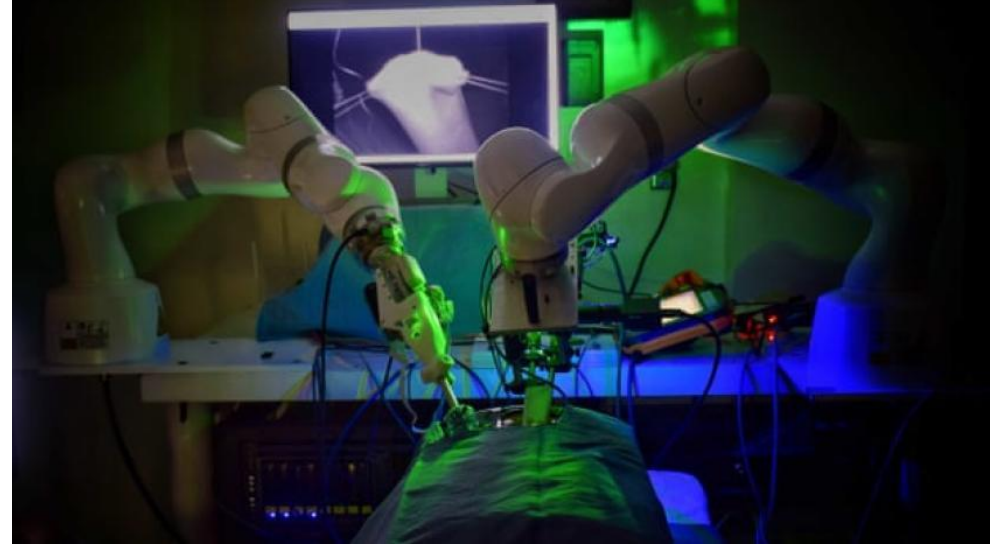
UniVATS: uniportal video-assisted thoracoscopic surgery.

Yakın Gelecekte Ne Bekliyor ?





Titan Medical: Seeking a niche in single-port robotic surgery

METAVERS



Cite this article as: Bertolaccini L, Casiraghi M, Spaggiari L. Immunotherapy in the neoadjuvant settings: a new challenge for the thoracic surgeon? *Interact CardioVasc Thorac Surg* 2020;30:1–3.

Immunotherapy in the neoadjuvant settings: a new challenge for the thoracic surgeon?

Luca Bertolaccini ^{a,*}, Monica Casiraghi ^a and Lorenzo Spaggiari^{a,b}

^a Division of Thoracic Surgery, IEO, European Institute of Oncology IRCCS, Milan, Italy

^b Department of Oncology and Hemato-Oncology, University of Milan, Milan, Italy

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Keywords: Lung cancer • Immunotherapy • Target therapies • Early stage • Non-small-cell lung cancer • Neoadjuvant treatments

ORIGINAL ARTICLE

Neoadjuvant Nivolumab plus Chemotherapy in Resectable Lung Cancer

P.M. Forde, J. Spicer, S. Lu, M. Provencio, T. Mitsudomi, M.M. Awad, E. Felip, S.R. Broderick, J.R. Brahmer, S.J. Swanson, K. Kerr, C. Wang, T.-E. Ciuleanu, G.B. Saylor, F. Tanaka, H. Ito, K.-N. Chen, M. Liberman, E.E. Vokes, J.M. Taube, C. Dorange, J. Cai, J. Fiore, A. Jarkowski, D. Balli, M. Sausen, D. Pandya, C.Y. Calvet, and N. Girard, for the CheckMate 816 Investigators*

ABSTRACT

BACKGROUND

Neoadjuvant or adjuvant chemotherapy confers a modest benefit over surgery alone for resectable non–small-cell lung cancer (NSCLC). In early-phase trials, nivolumab-based neoadjuvant regimens have shown promising clinical activity; however, data from phase 3 trials are needed to confirm these findings.

METHODS

In this open-label, phase 3 trial, we randomly assigned patients with stage IB to IIIA resectable NSCLC to receive nivolumab plus platinum-based chemotherapy or platinum-based chemotherapy alone, followed by resection. The primary end points were event-free survival and pathological complete response (0% viable tumor in resected lung and lymph nodes), both evaluated by blinded independent review. Overall survival was a key secondary end point. Safety was assessed in all treated patients.

RESULTS

The median event-free survival was 31.6 months (95% confidence interval [CI], 30.2 to not reached) with nivolumab plus chemotherapy and 20.8 months (95% CI, 14.0 to 26.7) with chemotherapy alone (hazard ratio for disease progression, disease recurrence, or death, 0.63; 97.38% CI, 0.43 to 0.91; $P=0.005$). The percentage of patients with a pathological complete response was 24.0% (95% CI, 18.0 to 31.0) and 2.2% (95% CI, 0.6 to 5.6), respectively (odds ratio, 13.94; 99% CI, 3.49 to 55.75; $P<0.001$). Results for event-free survival and pathological complete response across most subgroups favored nivolumab plus chemotherapy over chemotherapy alone. At the first prespecified interim analysis, the hazard ratio for death was 0.57 (99.67% CI, 0.30 to 1.07) and did not meet the criterion for significance. Of the patients who underwent randomization, 83.2% of those in the nivolumab-plus-chemotherapy group and 75.4% of those in the chemotherapy-alone group underwent surgery. Grade 3 or 4 treatment-related adverse events occurred in 33.5% of the patients in the nivolumab-plus-chemotherapy group and in 36.9% of those in the chemotherapy-alone group.



Dikkatiniz İin
Teşekkürler

