

Con il Patrocinio di



CARCINOMA DEL POLMONE NON MICROCITOMA: QUALI NOVITA' PER IL 2016?

Coordinatore scientifico
Stefania Gori

VERONA
8-9 APRILE 2016
Hotel Leon d'Oro





La Chirurgia nel 2016: indicazioni e prospettive

Dr. Alberto Terzi
U.O. Chirurgia Toracica



The IASLC Lung Cancer Staging Project: Proposals for Revision of the TNM Stage Groupings in the Forthcoming (Eighth) Edition of the TNM Classification for Lung Cancer



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Dalle origini.... al 2016

**....un po' di storia,
perché....**

Non sapere che cosa è accaduto prima di noi è come restare sempre bambini



Cicerone 106 - 43 a.C.

Nulla sa della sua arte chi non ne conosce la storia



Goethe 1749 - 1832

..naturalmente li omini boni vogliono sapere

Leonardo da Vinci



Chirurgia

- Χειρουργία
 - Cheir-cheiros, mano
 - Ergon, lavoro



- Etimologicamente attività lavorativa manuale

**...attività lavorativa manuale non
sempre molto amata...**

Chirurgia Romana

- Plinio (N. H. XXIX, 7, 14)
 - *I chirurghi hanno giurato fra di loro di sterminarci.
E si fanno anche pagare!*

Dal Rinascimento al XIX secolo

- *Nella Chirurgia non c'è maggiore scienza che in una pinta di birra*
 - Lord Thurlow
 - Dibattito parlamentare sulla nascita del Royal College of Surgeons (1811)



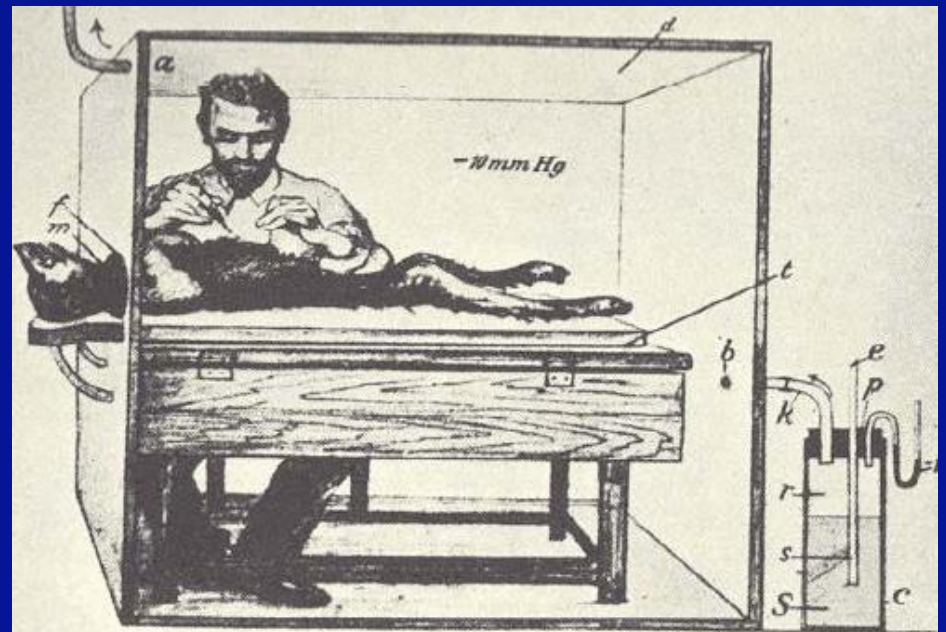
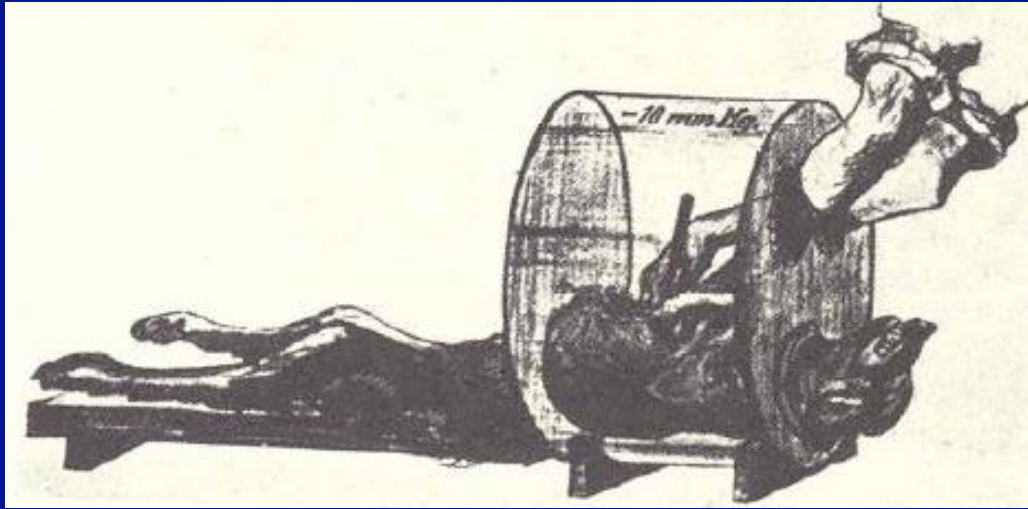
... e forse non a torto ...

Chirurgia del XIX secolo

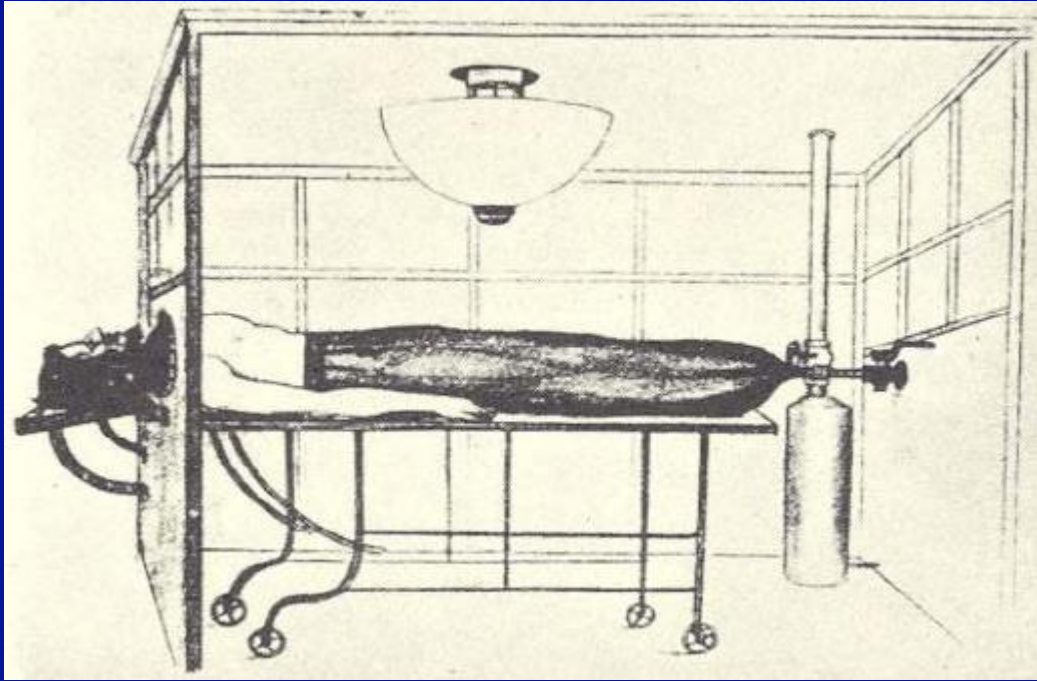
- Abiti borghesi
- Mani nude
- Strumenti sporchi e riutilizzati



Chirurgia Toracica - 1904



Camera di Sauerbruck



History of Lung Cancer

- ➔ The most salient point in the history of lung cancer is that it was almost non-existent before the twentieth century.
- ➔ Adler reported 221 collected cases to 1900 and 374 to 1912.
- ➔ Cigarette smoking as etiology first suspected by Soemmerling.

Hugh Morriston Davies: first dissection lobectomy in 1912.

Hugh Morriston Davies (1879-1965), long before anybody else, performed the first anatomic dissection lobectomy for a tumor of the lung in **1912**. (pz. Deceduto in 8 giornata)

He had introduced chest radiography and positive-pressure intra tracheal anesthesia the year before, thus making the diagnosis and operation of this lung cancer possible.

He concluded that **lung cancer was accessible to surgical removal on condition of an early diagnosis**.

1918: first successful lobectomy, by Harold Brunn

1933: first successful single-stage total pneumonectomy by Graham and Singer

1939: first segmentectomy, by Churchill and Belsey

**I problemi tecnici erano le scissure,
come separare i lobi riducendo al
minimo le perdite aeree e la sutura
del bronco**

Altro problema la toracotomia

CCCP

YTL



NGKA



USA

GIA



TA





Toracotomie

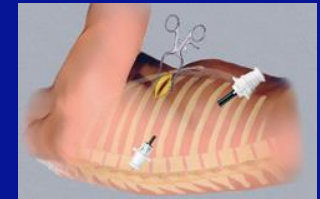
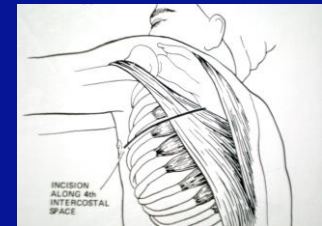
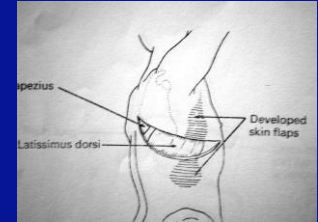


“Dio il Signore fece cadere un profondo sonno sull’uomo, che si addormentò; **prese una delle costole di lui, e richiuse la carne al posto d’essa**. Dio il Signore, con la costola che aveva tolta all’uomo, formò una donna e la condusse all’uomo” (*Gn 2:21,22*).

Toracotomie

- Noirclerc	1973
- Mitchell	1976
- Bethencourt	1988
- Horowitz	1989
- Heitmiller	1989
- Ashour	1990
- Ginsberg	1993

- Toracotomia postero-laterale
- Toracotomia laterale
- Toracotomia con risparmio muscolare
- Chirurgia Mini invasiva VATS



..... Tagli sempre più piccoli ma senza compromettere la radicalità oncologica.

Ma quanto piccoli?

3,5 – 4 cm



Sempre meno “invasivi” perché?

- **Meno dolore e complicazioni**
- **Meno giorni di ospedalizzazione**
- **Più rapida ripresa delle attività preoperatorie**

...e arriviamo al 2016

Lung Cancer

9:30 AM - 9:40 AM

9:40 AM - 9:50 AM

9:50 AM - 10:00 AM

10:00 AM - 10:10 AM

10:10 AM - 10:20 AM

10:20 AM - 10:30 AM

10:30 AM - 10:40 AM

10:40 AM - 11:00 AM

11:00 AM - 11:10 AM

Segmentectomy

Michael Kent, *Beth Israel Deaconess Medical Center*

VATS Extended Resections

*Thomas A. D'Amico, *Duke University*

Robotic Resection

*Robert J. Cerfolio, *University of Alabama at Birmingham*

VATS Mediastinal Lymphadenectomy

*David R. Jones, *Memorial Sloan Kettering Cancer Center*

VATS Sleeve Resection

*M. Blair Marshall, *Georgetown University*

Multiple GGO Lesions

*Haiquan S. Chen, *Fudan University Shanghai Cancer Center*

3D Modeling

*Shanda H. Blackmon, *Mayo Clinic*

Panel Discussion

Coffee Break

Programma 2016 congresso AATS





Society of Thoracic Surgeons (STS) 52nd Annual Meeting

January 23 - 27, 2016

Phoenix, Arizona 🇺🇸 (⭐⭐⭐⭐⭐)

Organized by : SOCIETY OF THORACIC SURGEONS (STS)

Specialties : SURGERY, THORACIC SURGERY

STS/AATS TECH-CON 2016

2:45 PM **Panel Discussion**
Gilbert H. Tang, New York, NY

1:00 PM – 3:00 PM **Room 120D**

General Thoracic Track I: Lung Surgery of the Future
Moderators: Julian Guitron, Loveland, OH, and Michael F. Reed, Hershey, PA

- 1:00 PM **Introduction**
Sunil Singhal, Philadelphia, PA
- 1:05 PM **Nodule Localization**
Sunil Singhal, Philadelphia, PA
- 1:20 PM **Energy for Pulmonary Artery Vessel Ligation**
Moishe A. Liberman, Montreal, Canada
- 1:35 PM **Lung Cryoablation**
Matthew R. Callstrom, Rochester, MN
- 1:50 PM **Veran Thoracic Navigation System**
Jennifer W. Toth, Hershey, PA
- 2:05 PM **Microlobectomy: A Novel Form of Video-Assisted Thoracoscopic Lobectomy**
Joel Dunning, Middlesbrough, United Kingdom
- 2:20 PM **Minimally Invasive Lung Ablation Using Electromagnetic Navigation Bronchoscopy and Cone Beam Computed Tomography Imaging**
Douglas J. Minnich, Birmingham, AL, and William Dickbans, Boulder, CO

3:30 PM – 5:00 PM **Room 120D**

General Thoracic Track II: Advances in Robotic Tools and Technology
Moderators: Mark F. Berry, Stanford, CA, and Jeremiah T. Martin, Lexington, KY

- 3:30 PM **DaVinci XI Firefly and Staplers**
Bernard J. Park, New York, NY
- 3:45 PM **Spy/Pinpoint**
Min P. Kim, Houston, TX
- 4:00 PM **Robotic Technology in Development**
Mark R. Dylewski, Palmetto Bay, FL
- 4:15 PM **Emerging Robotic Tools**
David C. Rice, Houston, TX
- 4:30 PM **New Robotic Platforms**
Robert J. Cerfolio, Birmingham, AL
- 4:45 PM **New Haptic Technology for Robotic Surgery**
Mark W. Onaitis, Durham, NC



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L'infinito problema dell'N2 !!!



Point/Counterpoint: Does surgery play a role in N2 disease treatment following induction therapy?

POINT: Surgery has its uses for some BY DR. STEPHEN G.

SWISHER When talking about the role of surgery after induction therapy with persistent N2 disease, one must...

Pro- Con

plus ça change, plus c'est la même chose

Jean-Baptiste Alphonse Karr

2016 Ritorno al...passato ?

Pneumonectomy for Clinical Stage IIIA Non-Small Cell Lung Cancer: The Effect of Neoadjuvant Therapy

Stephen R. Broderick, MD, MPHS, Aalok P. Patel, BS, BA, Traves D. Crabtree, MD, Jennifer M. Bell, RN, BSN, Daniel Morgansztern, MD, Clifford G. Robinson, MD, Daniel Kreisel, MD, PhD, A. Sasha Krupnick, MD, G. Alexander Patterson, MD, Bryan F. Meyers, MD, MPH, and Varun Puri, MD, MSCI

Department of Surgery, Division of Cardiothoracic Surgery, St. Luke's Hospital, Chesterfield, Missouri; Department of Surgery, Division of Cardiothoracic Surgery, Department of Medicine, Division of Oncology, and Department of Radiation Oncology, Washington University School of Medicine, St. Louis, Missouri

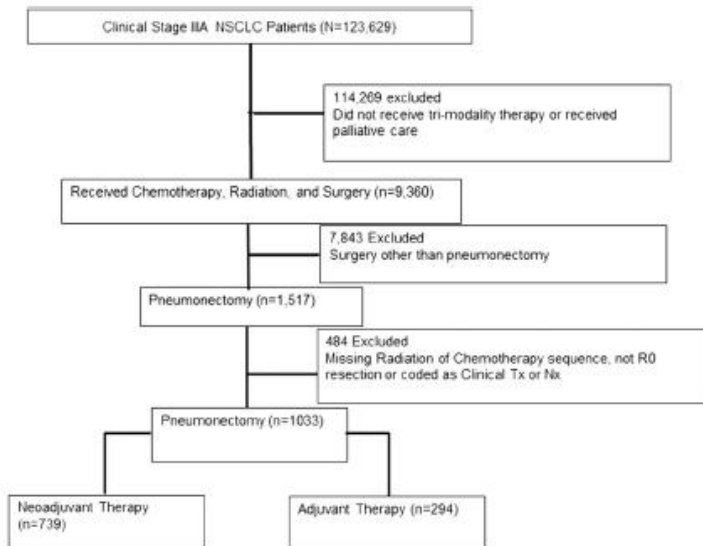
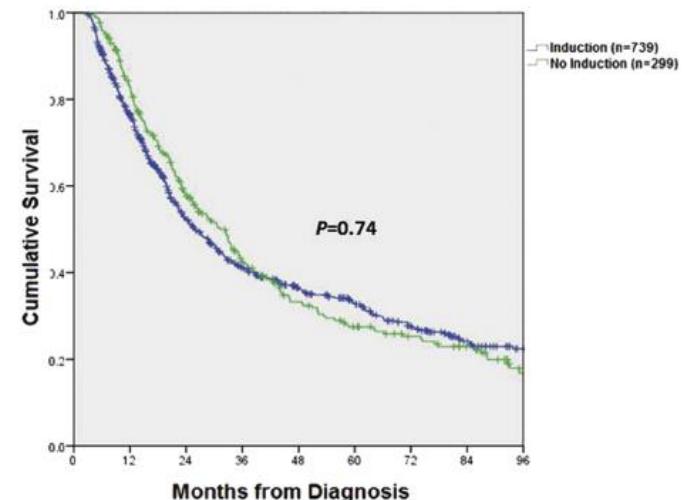


Fig 2. Kaplan-Meier curve comparing patients with clinical stage IIIA non-small cell lung cancer requiring pneumonectomy treated with neoadjuvant (blue line) vs adjuvant (green line) chemotherapy and radiotherapy ($p = 0.74$ by log-rank test).



Invasive mediastinal staging is irrelevant for PET/CT positive N2 lung cancer if the primary tumour and ipsilateral lymph nodes are resectable

www.thelancet.com/respiratory Vol 3 September 2015

**Eric Lim, Philip J McElnay, Gaetano Rocco, Alessandro Brunelli, Gilbert Massard, Alper Toker, Bernward Passlick, Gonzalo Varela, Walter Weder*
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Realtà e/o prossimo futuro

[Curr Opin Anaesthesiol](#). 2016 Feb;29(1):20-5. doi: 10.1097/ACO.0000000000000282.

Fast track in thoracic surgery and anaesthesia: update of concepts.

[Loop T](#)¹.

⊕ Author information

Abstract

PURPOSE OF REVIEW: Update of key elements on enhanced recovery after thoracic anaesthesia and surgery.

RECENT FINDINGS: Pathways to enhance recovery after thoracic surgery ('fast-track') aim to improve response to lung surgery, reduction of postoperative pulmonary complications, and restore patient's vital function. Uncomplicated recovery after lung surgery reduces morbidity, hospital stay, and costs. Video-assisted thoracoscopic surgery is a major part of enhanced recovery minimizing tissue injury and stress response. Maintaining patient's physiology throughout perioperative processes by optimized anaesthesiological management and effective pain control present a crucial role in improving outcome.

SUMMARY: The concept of enhanced recovery ('fast-track') after thoracic surgery and anaesthesia was developed in recent years making allowance to the increased number of video-assisted parenchymal lung resections in managing primary lung cancer. Current studies promote the benefit in thoracic surgical patients, if an established departmental protocol-based algorithm is implemented.

Journal of Thoracic Disease

J Thorac Dis. 2014 Jan; 6(1): 2–9.

PMCID: PMC3895586

doi: [10.3978/j.issn.2072-1439.2014.01.16](https://doi.org/10.3978/j.issn.2072-1439.2014.01.16)

Nonintubated thoracoscopic surgery: state of the art and future directions

Ming-Hui Hung,^{1,2} Hsao-Hsun Hsu,³ Ya-Jung Cheng,^{✉1} and Jin-Shing Chen^{✉3,4}

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This article has been [cited by](#) other articles in PMC.

Abstract

Go to:

Video-assisted thoracoscopic surgery (VATS) has become a common and globally accepted surgical approach for a variety of thoracic diseases. Conventionally, it is performed under tracheal intubation with double lumen tube or bronchial blocker to achieve single lung ventilation. Recently, VATS without tracheal intubation were reported to be feasible and safe in a series of VATS procedures, including management of pneumothorax, wedge resection of pulmonary tumors, excision of mediastinal tumors, lung volume reduction surgery, segmentectomy, and lobectomy. Patients undergoing nonintubated VATS are anesthetized using regional anesthesia in a spontaneously single lung breathing status after iatrogenic open pneumothorax. Conscious sedation is usually necessary for longer and intensively manipulating procedures and intraoperative cough reflex can be effectively inhibited with intrathoracic vagal blockade on the surgical side. The early outcomes of nonintubated VATS include a faster postoperative recovery and less complication rate comparing with its counterpart of intubated general anesthesia, by which may translate into a fast track VATS program. The future directions of nonintubated VATS should focus on its long-term outcomes, especially on oncological perspectives of survival in lung cancer patients. For now, it is still early to conclude the benefits of this technique, however, an educating and training program may be needed to enable both thoracic surgeons and anesthesiologists providing an alternative surgical option in their caring patients.

Keywords: Thoracoscopy, lung cancer, intubation, anesthesia, intercostal nerve block, thoracic epidural anesthesia

Nonintubated anesthesia in thoracic surgery: general issues

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Aumenterà casistica chirurgica?

Salvage Pulmonary Resection Following SBRT: A Feasible and Safe Option For Local Failure

*Mara B. Antonoff, Arlene Correa, Boris Sepesi, Quynh-Nhu Nguyen, *Garrett Walsh, *Stephen Swisher, *Ara Vaporciyan, *Reza Mehran1, *Wayne Hofstetter, *David Rice*
UT MD Anderson Cancer Center, Houston, TX

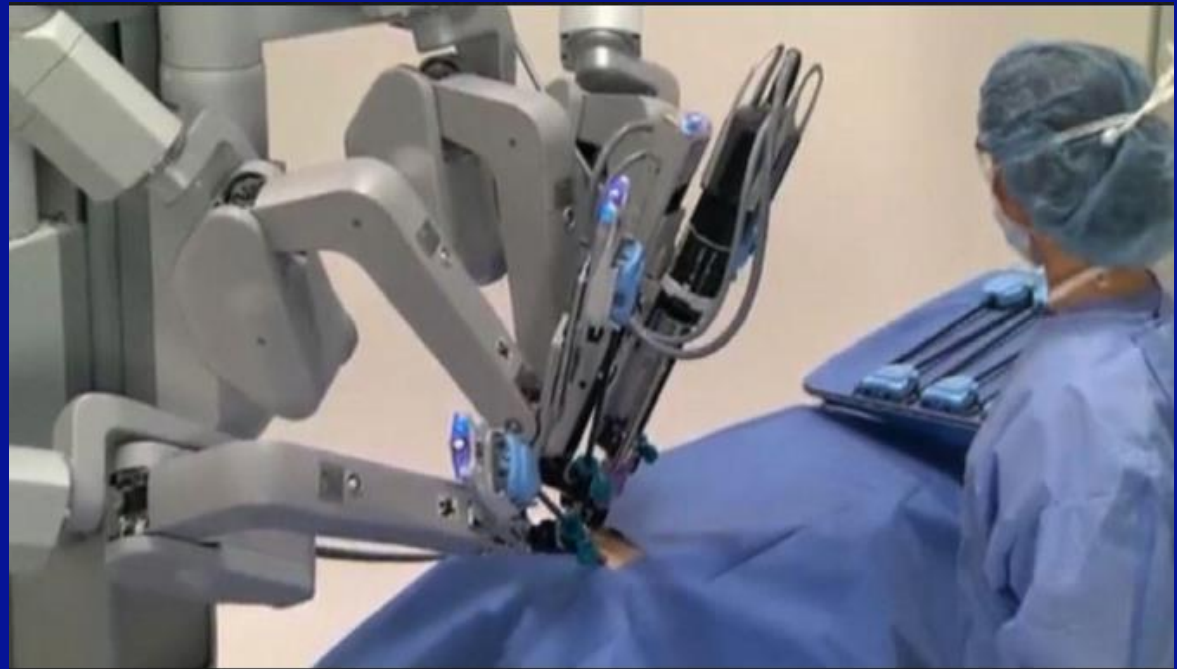
Objective: For inoperable patients with early staged non-small cell lung cancer (NSCLC) and pulmonary metastases, stereotactic body radiotherapy (SBRT) has surfaced as a reasonable therapeutic option. In recent years, use of SBRT for pulmonary lesions in potentially operable candidates has gained interest. However, the ideal management of local recurrence following SBRT remains unclear. As the use of SBRT for potentially operable patients with primary NSCLC and metastatic disease continues to expand, we may anticipate an increasing number of local failures that may require surgical salvage. In this study, we aimed to investigate the outcomes of pulmonary resection following local failure of SBRT.

Methods: A retrospective review was conducted of patients at a single institution who underwent operative resection between 2009-2015 of pulmonary lesions previously treated with SBRT. Data were collected from a departmental database and supplemented with chart review. Variables collected pertained to demographics, comorbidities, histology, staging, radiation, operative details, recurrence, and vital status. In addition, a literature search was conducted to identify previous reports of pulmonary resection for local SBRT failures, in order to allow cumulative analyses of all previously published cases. Kaplan Meier analyses were performed to evaluate survival.

Results: 21 patients met inclusion criteria at our institution. Among these individuals, median preoperative FEV-1 and DLCO were 71% and 58% of predicted, respectively. Median time between SBRT and surgery was 16.2 months (range 6.4-71.5). Postoperative complications were seen in 7 (18.9%), with the most frequent complications being atrial arrhythmia and prolonged air leak (n = 2 for each, 5.4%). Recurrence occurred in 5/21 (23.8%), with a median time to recurrence of 36.2 months and median disease-free survival of 19.2 months. All post-operative recurrences were distant. 30-and 90-day mortality were both 1 (4.8%). The cumulative review included 37 patients at 4 institutions, comprised of 26 (78.8%) NSCLC and 11 (29.7%) pulmonary metastases. 8 (21.6%) were deemed medically inoperable at initial presentation. Overall median time between SBRT and surgery was 16.1 months (range 6.4-104 months). The median overall survival following surgery was 46.9 months, and 3-year survival was 70.1% (Figure).

Conclusions: Following local failure of SBRT, pulmonary salvage resection remains a viable option, with acceptable morbidity and reasonable survival. As indications for SBRT continue to expand, further studies to evaluate the optimal management for local failure are in need.

RATS



Narrower shaft & more angulation endostapler

Multiple intrathoracic MAGS Cameras

The complex block contains several elements: a text box at the top left with a yellow arrow pointing to a close-up image of a surgical stapler; a central image showing a surgeon performing a procedure with a monitor displaying four camera views; and a bottom right section with a logo and text describing the camera system.

mini RATS ???

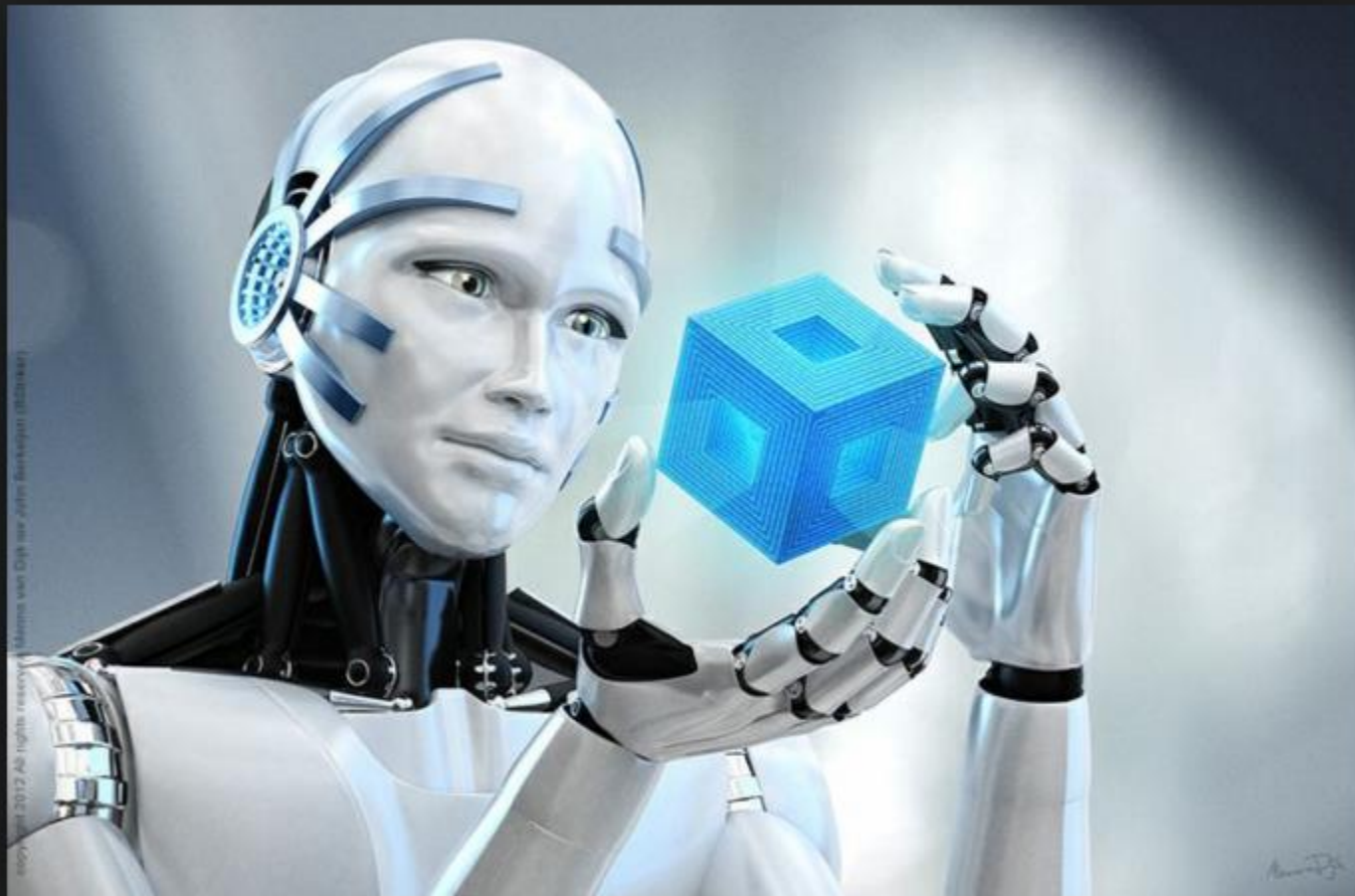


Robot con 4 braccia, consolle, robot con un braccio e più “mani”

Sempre più tecnologia ma... Cosa cambia in termini di sopravvivenza per il paziente?

Specchio per le allodole?





The Best Way to Predict the Future is to Invent It

Alan Key



Grazie dell'attenzione