Why A CPRL-4 will be better than a VATS Lobectomy

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- Intuitive
Robotics in Thoracic Surgery

Opening Argument

• Definitions - both Vats and Robotic lobe performed ways
• Compares Completely Portal Robotic Lobectomy, using 4 robotic arms (CPRL-4) to Vats lobe
• Facts of this case are clear
• I have the ultimate MIS surgical technique – superior visibility, superior instruments and range of movements, superior setting to teach residents, fellows, medical students even to document skills ..
• Superior simulator – robot itself coupled MIMIC software - 1/2011
• How is this even a debate? Only b/c year – 2010 - robot infancy thor
• Our technique is new, costs more, represents a paradigm shift, revolution always meet with resistance – naysayers
• History is full of examples of this type of debate ......
Robotics in Thoracic Surgery

Opening Argument

• George B Selden – 1880 – “although the concept of an automobile has promise, car too big, expensive and too cumbersome ... never safe enough for everyday American to learn to use”
• Abram Pheil - 1917 - “air travel is too costly .. always will be too costly and unsafe .. few average Americans will ever be able to fly”
• And today, 11/2010 – Tommy (anti - da Vinci) D’Amico - “Robotic thoracic surgery costs too much, the instruments are too expensive to use everyday .. and it will never replace Vats for lobectomy”
• Examine published data true – only b/c it is 2010 in Thoracic - data is coming ......
• Now lets review facts today case ...
Robotics in Thoracic Surgery
Teaching with Robotics
Robotics in Thoracic Surgery

Facts - Education

- Robot ultimate MIS – ultimate educator – shown in OR, clinically
- In addition, robot possesses unique property - SI connect allows surgeons to teach -and remote proctoring ....
- Our CPRL-4 technique - already using 5 mm, and 8 mm ports, 8 mm 3D camera ..... soon, single incision robots with 3 or 4 arms
- Jan 2011, the greatest simulator in surgery finally arrive - software package MIMIC
- Snaps onto back of a D’Amico .. da Vinci .. console allow training - provide metrics to measure robotic skills’ speed/accuracy - document robotic proficiency
- Why robotics? Probably lead to improve 5 yr survival thus it is here to stay – future MIS is unequivocally robotic
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**Facts**

- The da Vinci Robot expands the pool of patients who can get a MIS operation.
- Allows for complete portal resection of much larger tumors - 9 and 10 cm tumors, with N1 disease, after radiation and chemotherapy.
- In addition, it allows more surgeons to be able to offer MIS surgery - improves visualization and instrumentation, easier adoption.
- It also will probably expand the lifetime of the surgeon - allows one to sit instead of stand, offers improved vision, 10 magnification, eliminates tremor.
- The LN dissection is easier to teach and is more complete - ask anyone who has really tried both techniques honestly.
- Some say that - VATS lobectomy is now an intermediate step towards ultimate MIS – CPRL -4..

Completely portal operations.
Advantages over VATS

- Advantage – besides better visibility, magnification, improved degree of hand and wrist movements - this part of lack of adoption of Vats
- Surgeon less reliant on bedside assistant and team members - steer own camera, CPRL-4 retract yourself, and clinical teaching is unparalleled
- Future of robot compared Vats is dramatic - b/c more rapid tech advancements and miniaturization
- Better facilitates education and teaching
Robotics in Thoracic Surgery
Prepare Future

- Even think VATS lobe equivalent to Robotic lobe how going do thymectomy, neurilemoma, other mediastinal work
- Even staunchest VATS proponent agrees robot is superior here (if they have tried it) especially for thymectomy
- Thus need robot and robotic skills
- If teaching institution, mandatory to have the robotic training attract best candidates – then we can ensure proper credentialing of at least residents / fellows
Robotic surgery is the treatment of choice for mediastinal work—thymectomy, mediastinal tumors, esophageal duplication cysts. It is the best teaching device in the operating room and the best simulator, offering the best instruments and view, improved lymph node dissection for minimally invasive surgery (MIS).

Thus, my opponent is left with cost, credentialing, the fact that stapling is done by the assistant, and the lack of a robotic sucker as weaknesses of robotics.

Soon all of these will be solved.

Yes, cost is a critical issue. Cost like any new technology, cell phone, laptop, etc., comes down with time and with competition. Should we really withhold superior care to our patients secondary to cost?