Small Cell Lung Cancer

Systemic Approach Made Easy

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OUTSTANDING CARE – NO EXCEPTIONS!

Disclosures

- No conflict of interest
- Educational grants: Amgen
- Consultancy Board Honoria: Amgen, Novartis, AstraZeneca

Case Hx

- 58 year old male (Mr. RE) admitted to RCU Dec. 2016 progressive SOB and uncontrolled A Fib / Rapid V response
- PMH
  - Rt upper lobectomy 2008 T1 N1 M0 (stage 2) Adeno carcinoma lung (declined chemo)
  - COPD, HTN, GERD, depression, ch back pain
- 50 PPY smoker

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- Required 10LO2/minute to keep Sat adequate
- CXR and CT L U L lesion
- Urgent bronchoscopy and biopsy
- Pathology confirmed small cell lung cancer, compared with previous pathology

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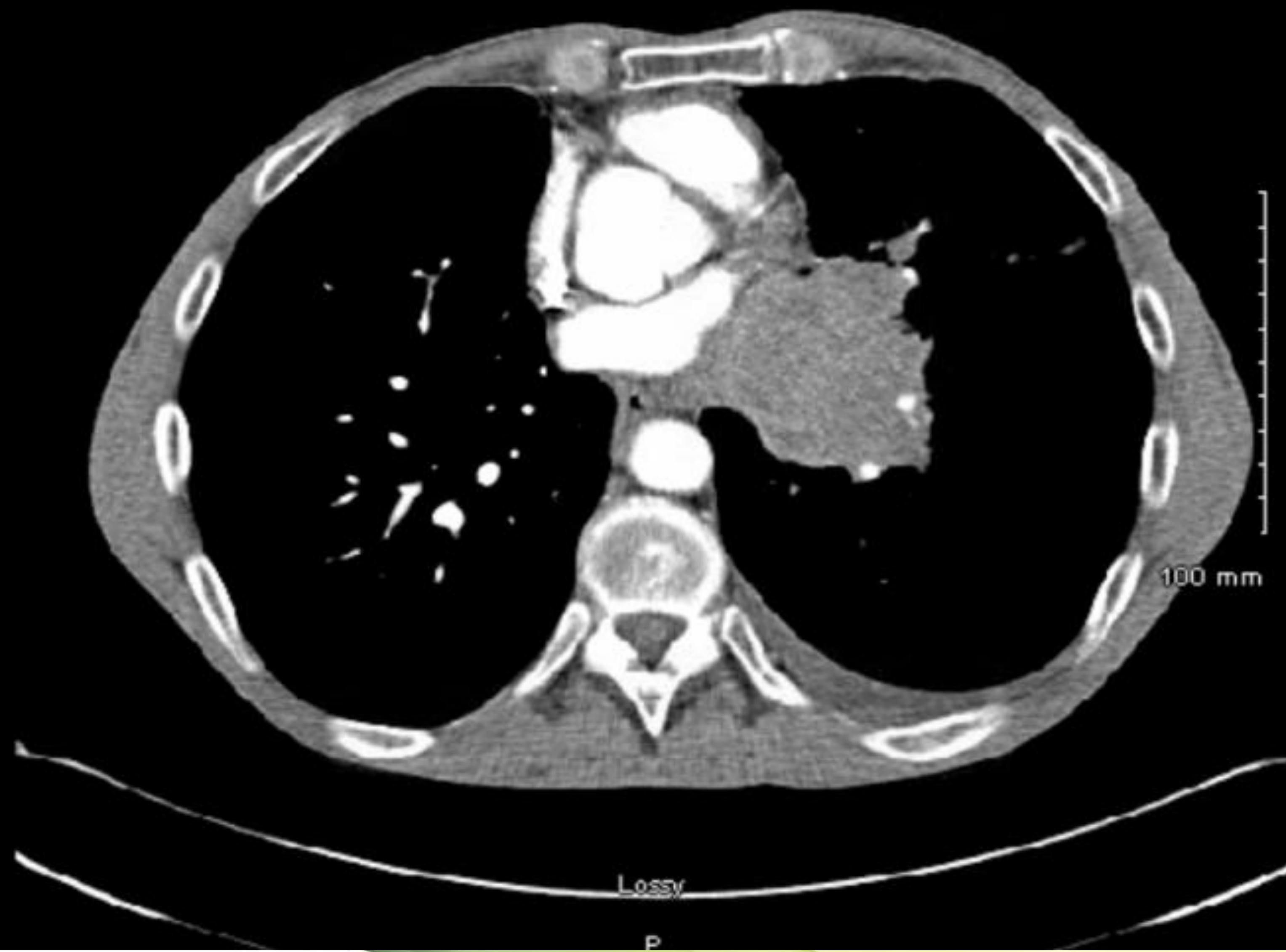
Question

How do I get this patient seen by the right services in the next 24-48 hours?

- Call Dr. Kay
- Call Dr. Dhar
- Refer to LDAP
- Send to ER
- Call David Musyj
- All of the above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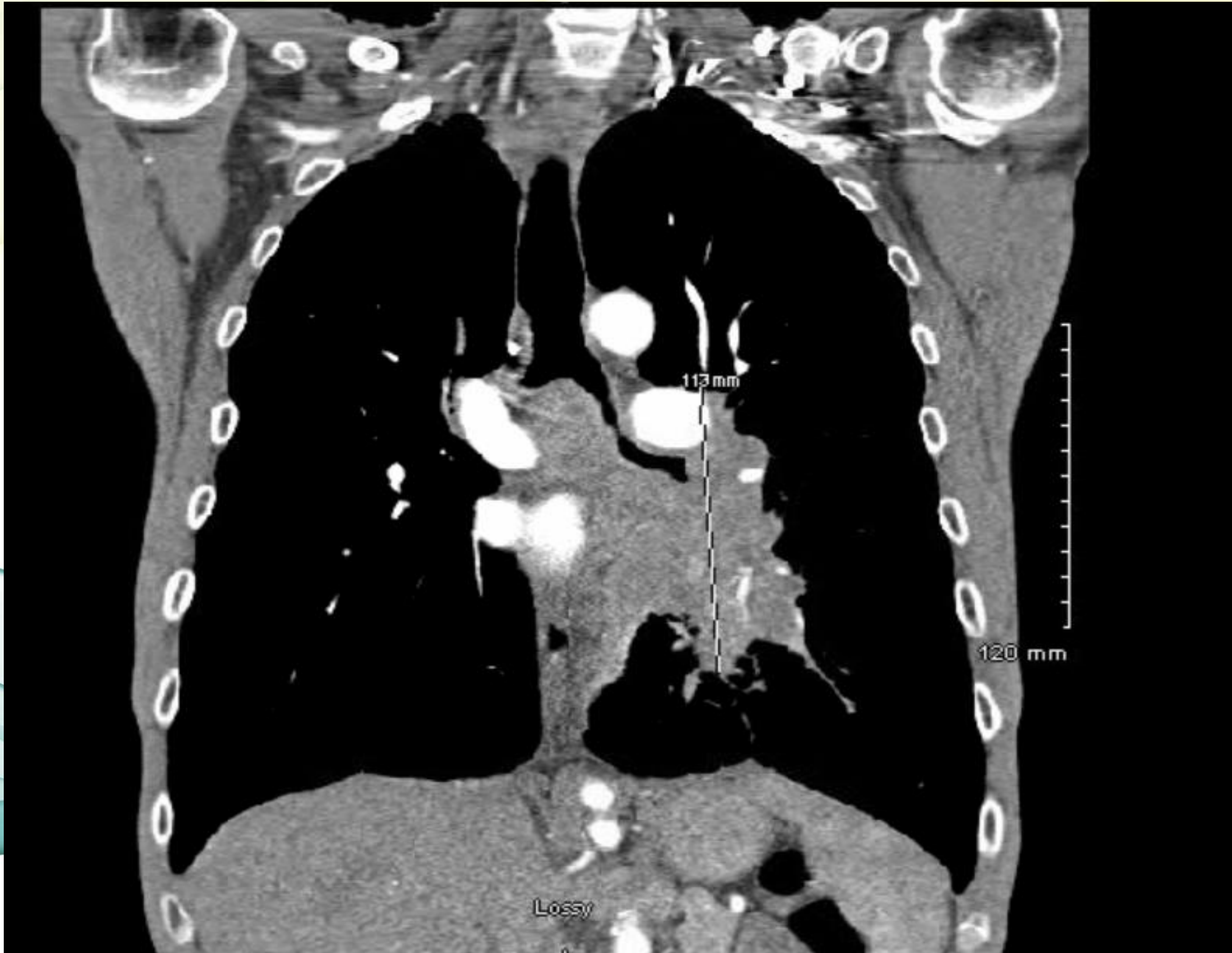

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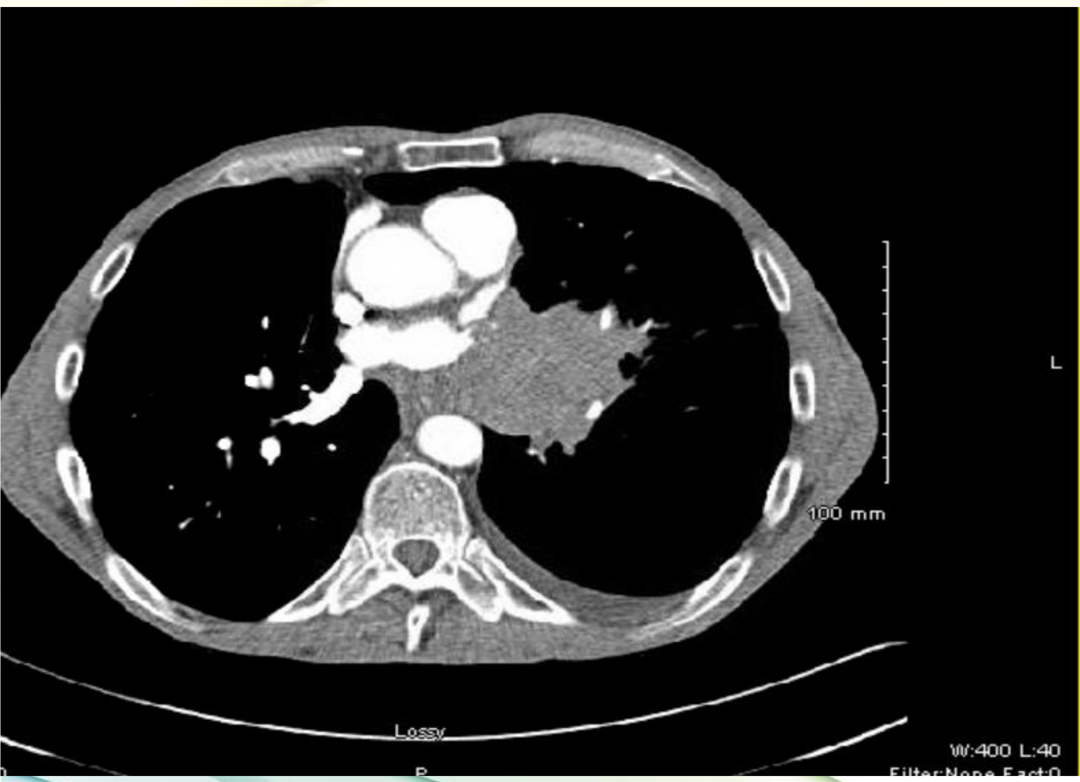
- Assessed and transferred to Medical Oncology Unit
- **Urgent** chemotherapy recommended
- Discharged home after 2 week from initial chemotherapy with mobile O2 which he did not require any further 2 weeks later
- Received 4 cycles of platinum and Etoposide
- CT scan on follow up as follows



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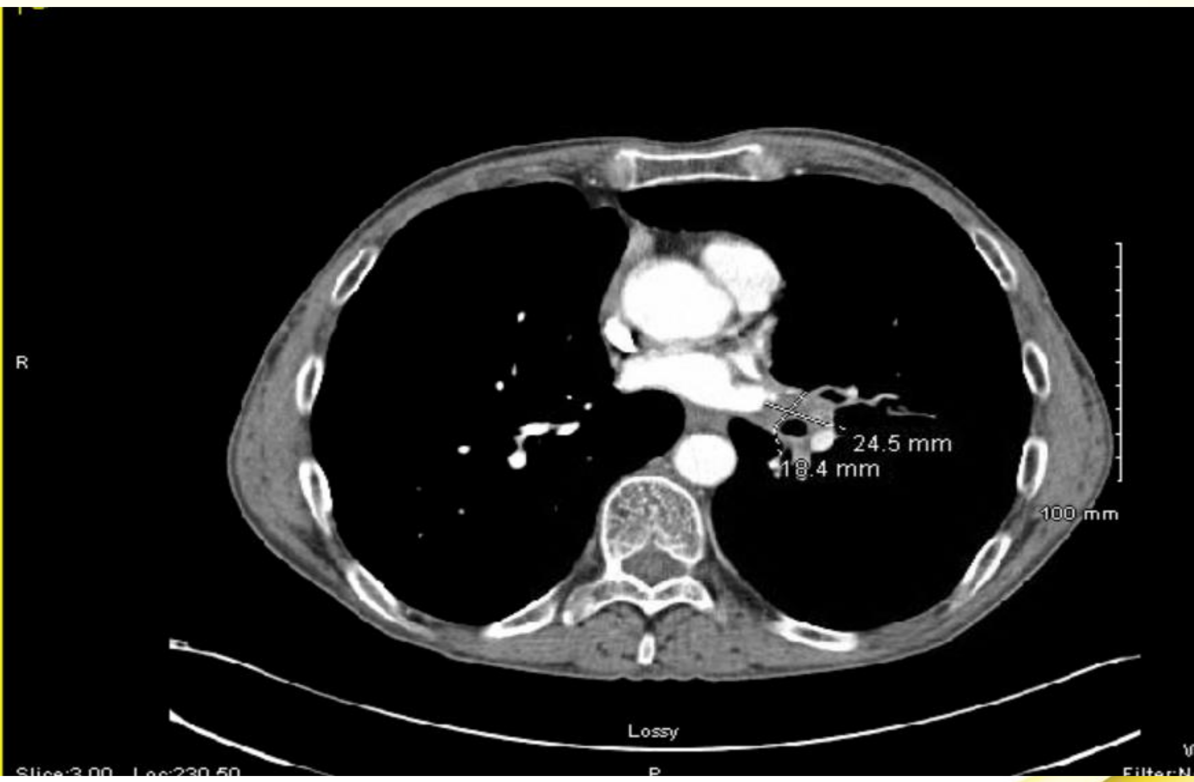

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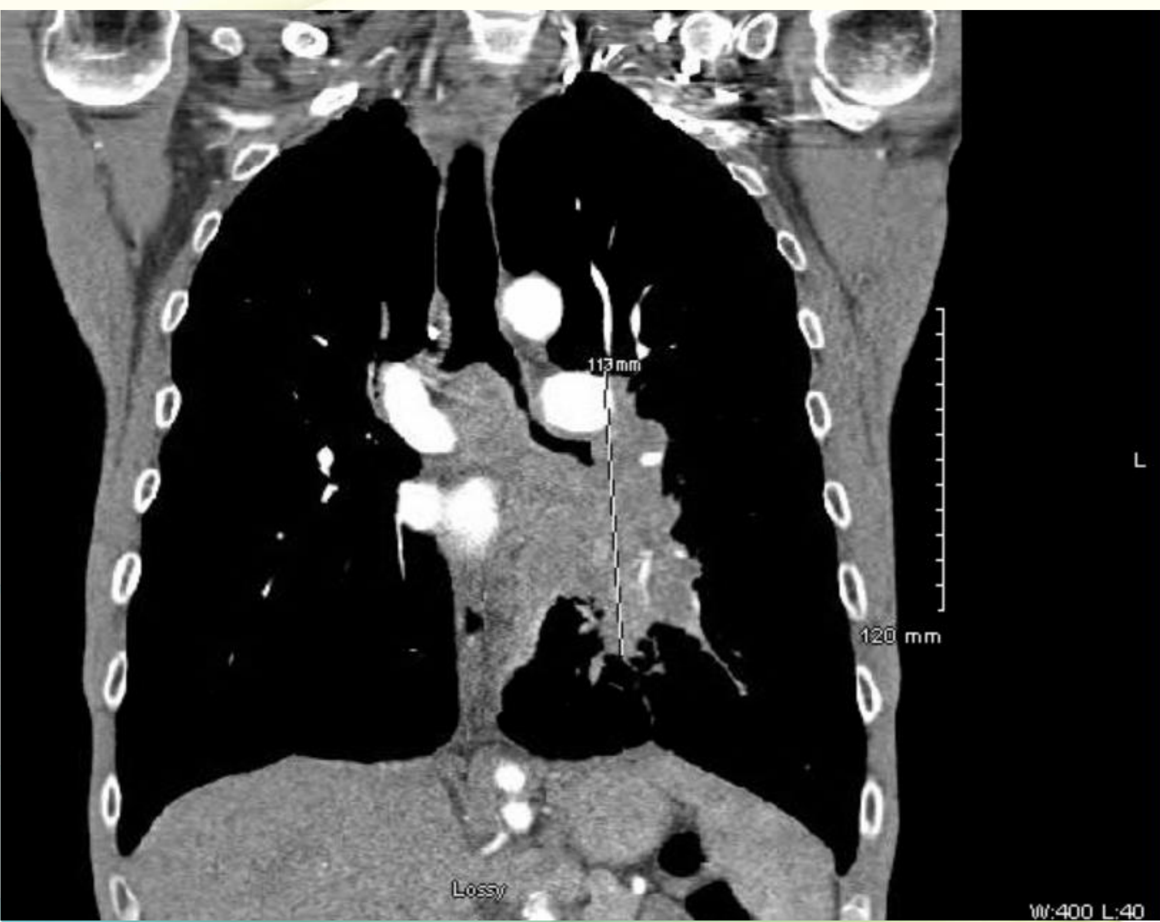
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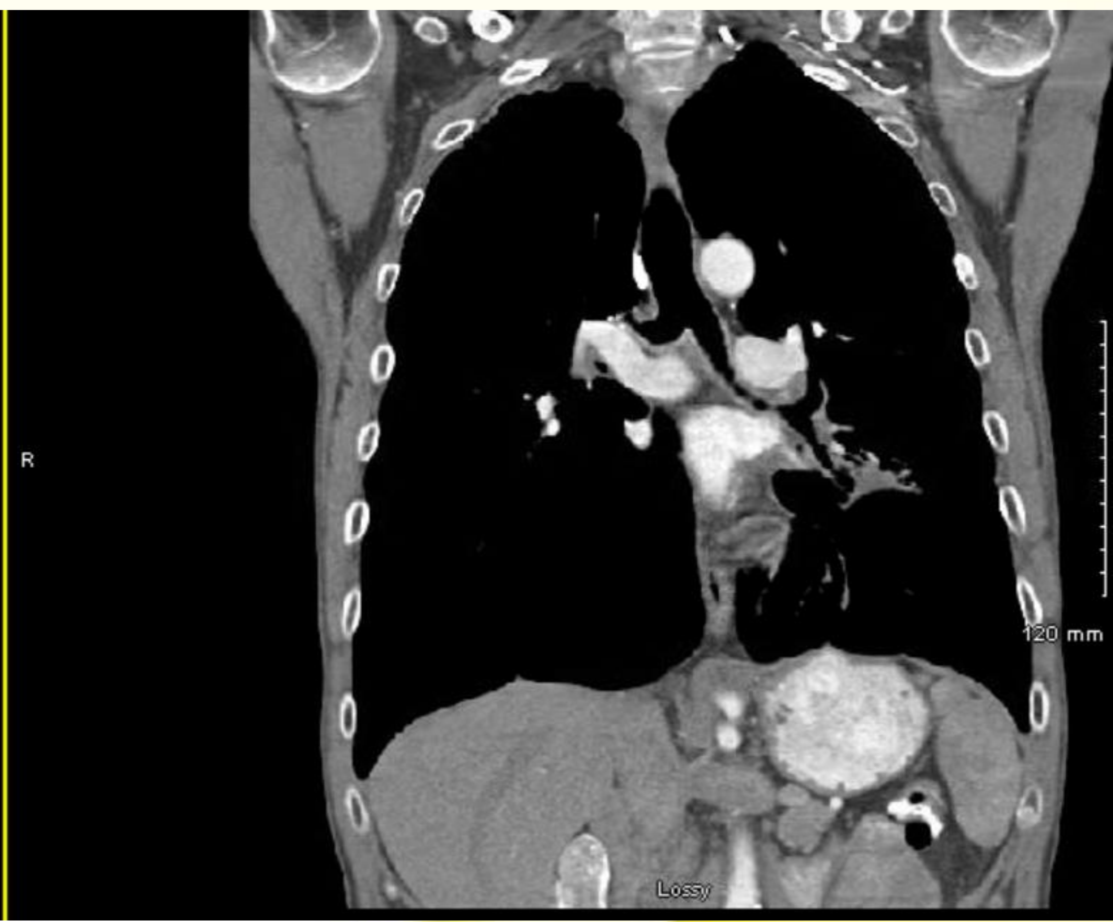
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Small Cell Lung Ca

- Small cell lung is distinct clinical subtype
- Most aggressive (rapid growth and early metastasis)
- At dx 60-70% already metastatic
- Cigarette smoking is the strongest risk factor
- Median survival 12 - 14 month +/- 2 , % years survival 2 %
- For limited stage disease median survival is 17 month and 5 yr. survival is about 17%

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Diagnosis & Staging

- TNM
- Limited vs. Extensive
- Pathological bx gold standard
- CT guided or bronchoscopy
- If and when possible the easiest and most upstaging site

Treatment

- Principally chemotherapy
- Platinum and etoposide
- Reponses rates are high
- Chemo radiotherapy complete RR 50-60 %
- Up 10-20% in extensive stage disease
- Chemotherapy usually results in rapid and significant improvement in QoL with very acceptable side effect profile
- Well tolerated

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Chemotherapy Side Effects

- **N/V**
- Fever, Feb neutropenia
- Cytopenia and transfusions
- Neuropathy
- Renal impairment and salt deficiency
- High Ca, para neoplastic syndromes
- Brain metastasis

Management

- **<u>TIME SENSTITIVE</u>**
- Multidisciplinary
- Involves multi-services
- Requires multiple support team involvements
- Please call us ASAP

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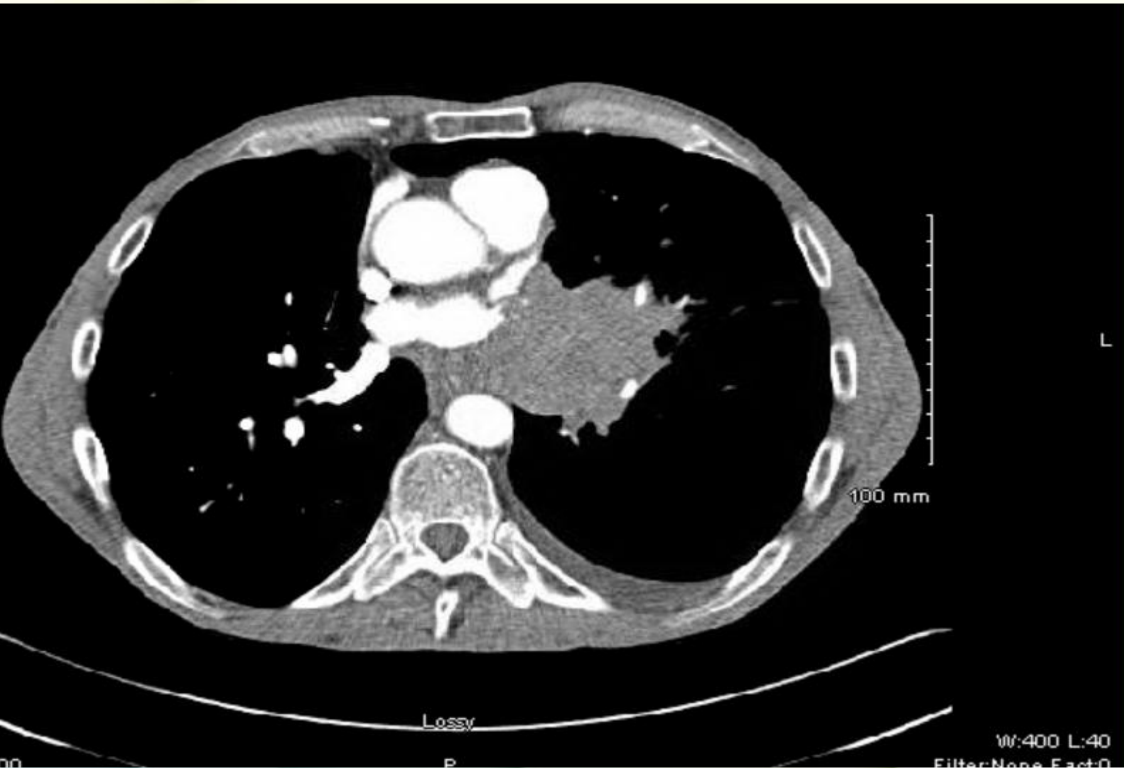
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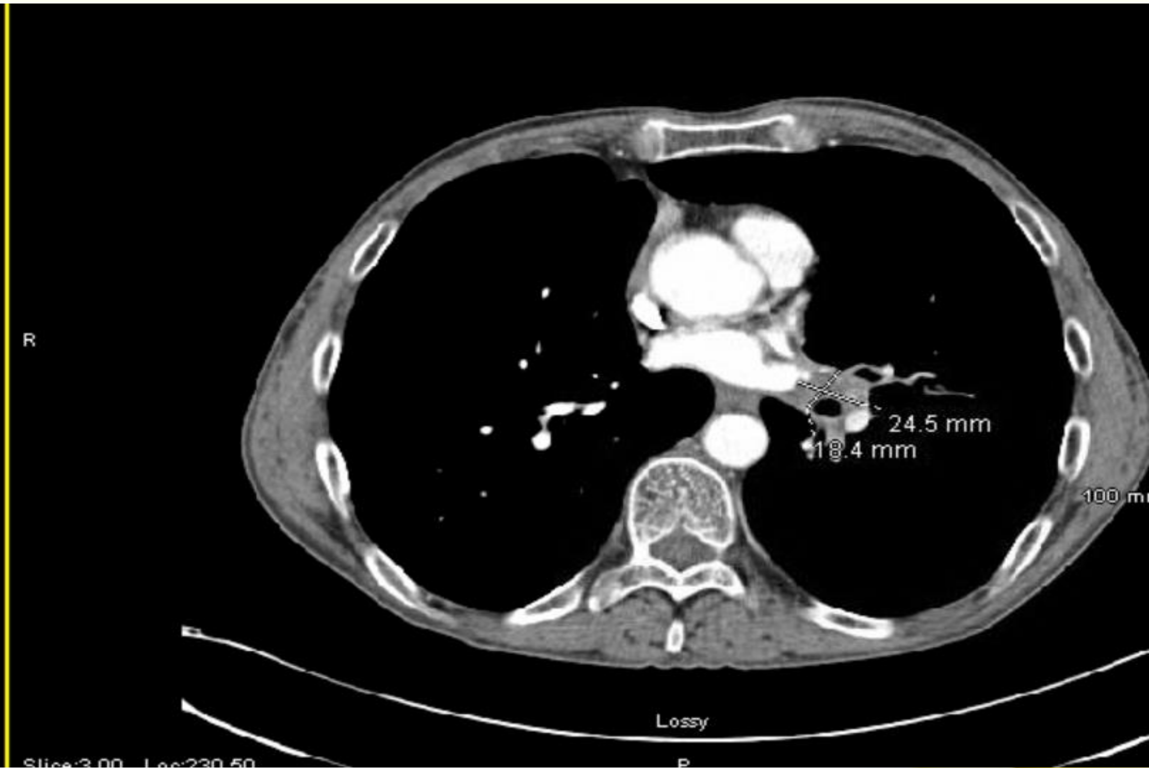
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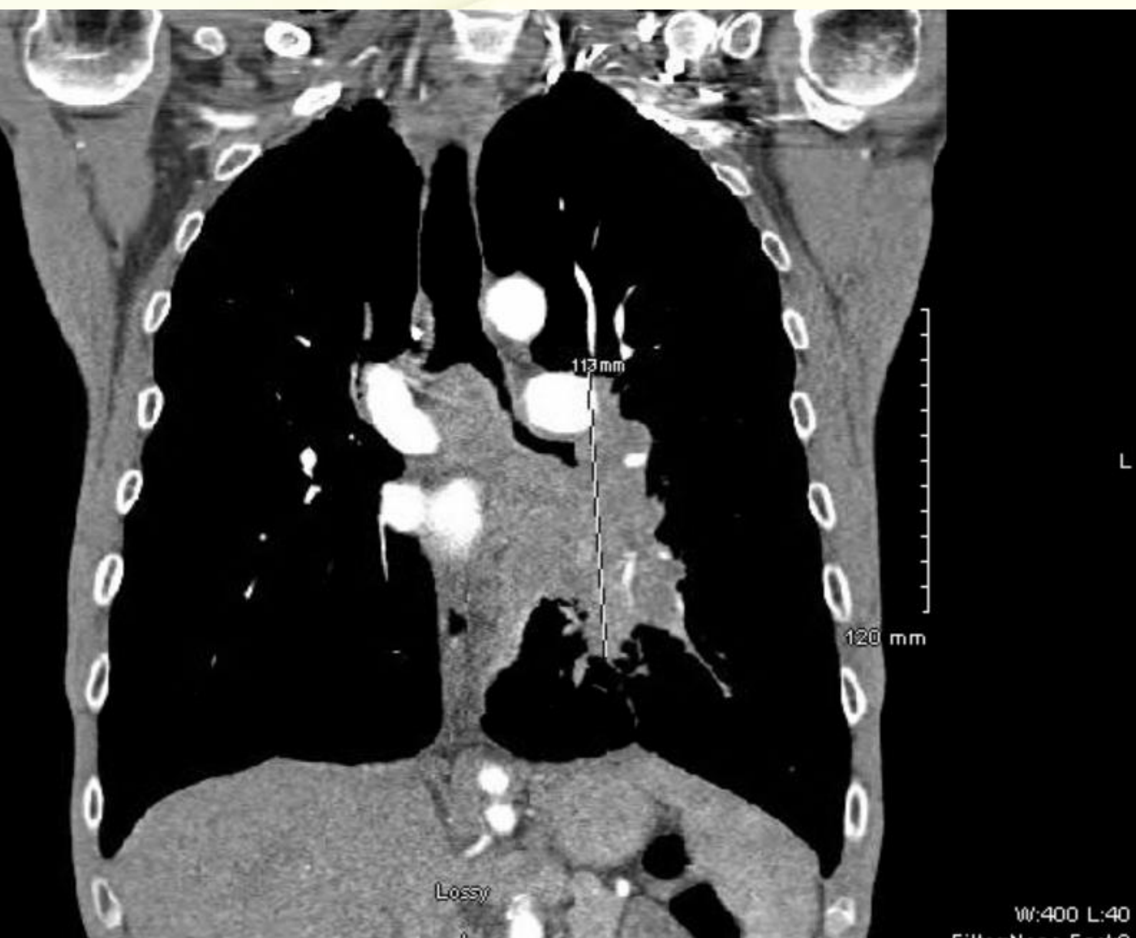

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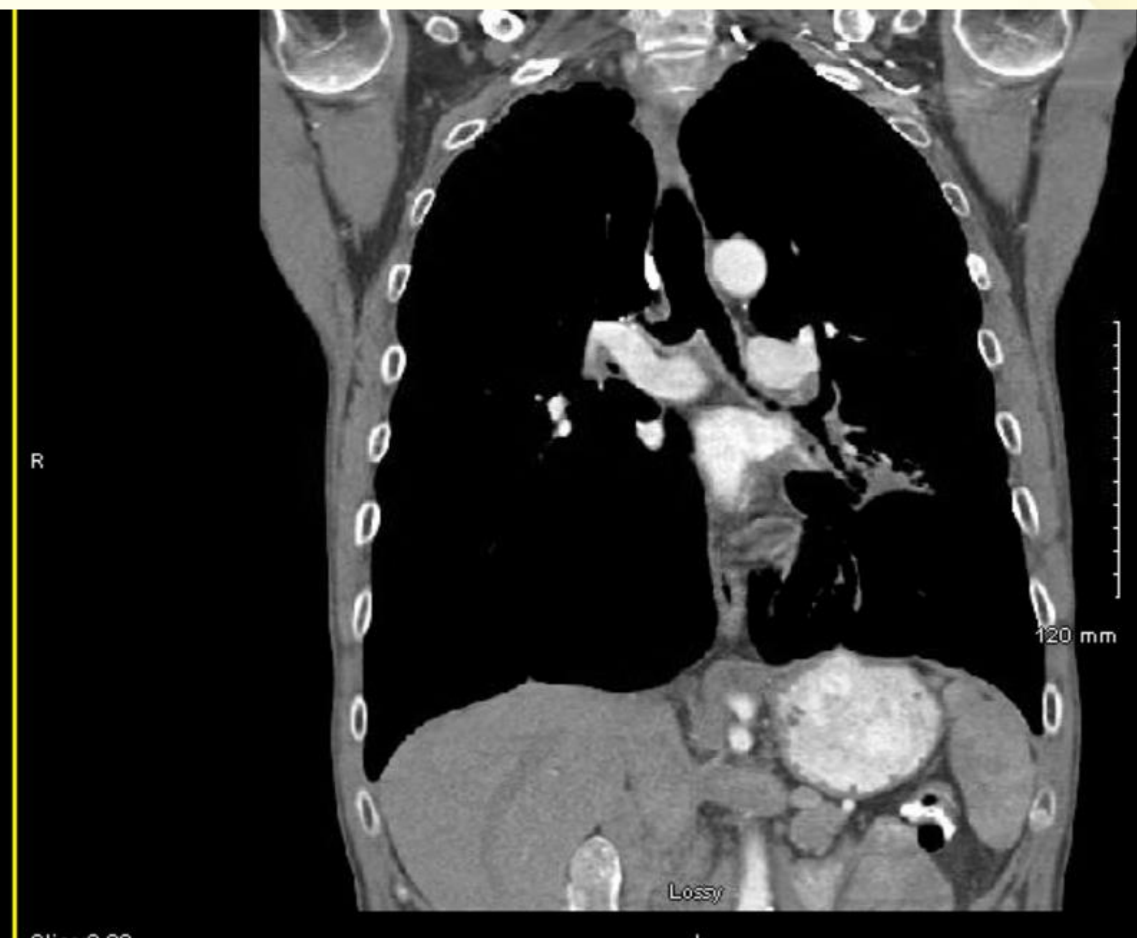

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Clinical

- Central bulky disease
- Rapid clinical hx or course of illness
- High index to suspect small cell lung ca

Natural History

- Most relapse within 12 month despite initial high response rates
- Late relapse > 6 month
- Some progress >3 month sensitive disease
- Some progress < 3 month resistant disease
- Some progress on chemo refractory disease Carry dismal prognosis

Second Line Chemotherapy

- Topotecan
- Irinotecan
- Oral Etoposide
- Clinical Trial

  (every lung cancer clinical trial vision)

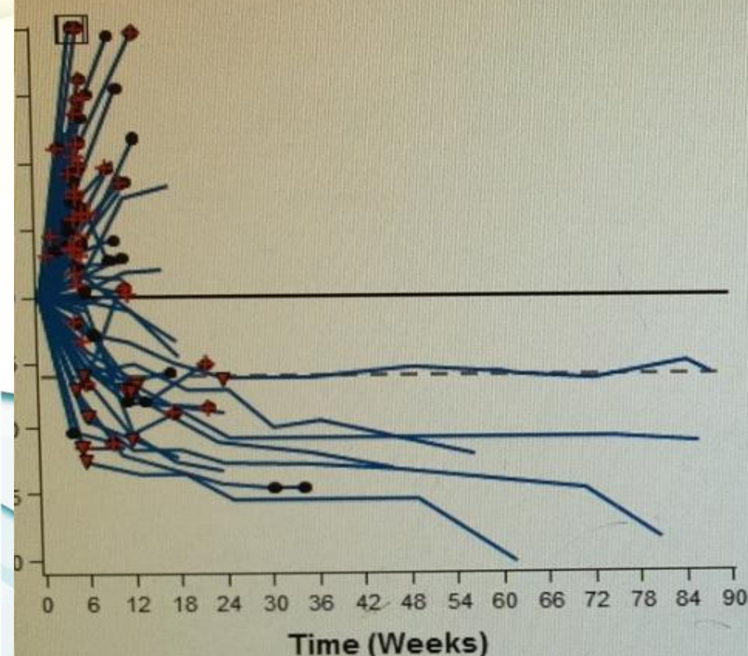
Radiotherapy and Small Cell Ca

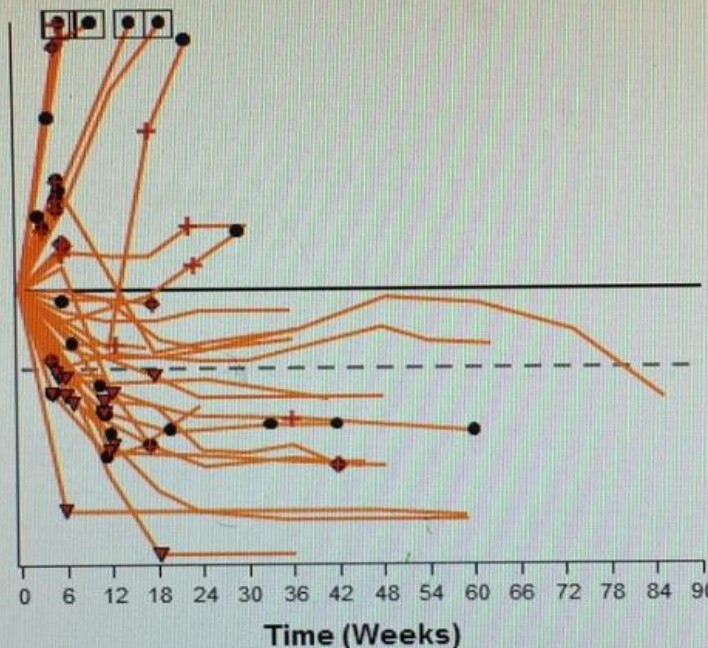
- Concurrent for limited disease
- Prophylactic cranial radiotherapy
- Consolidative after CR in extensive
- Palliative

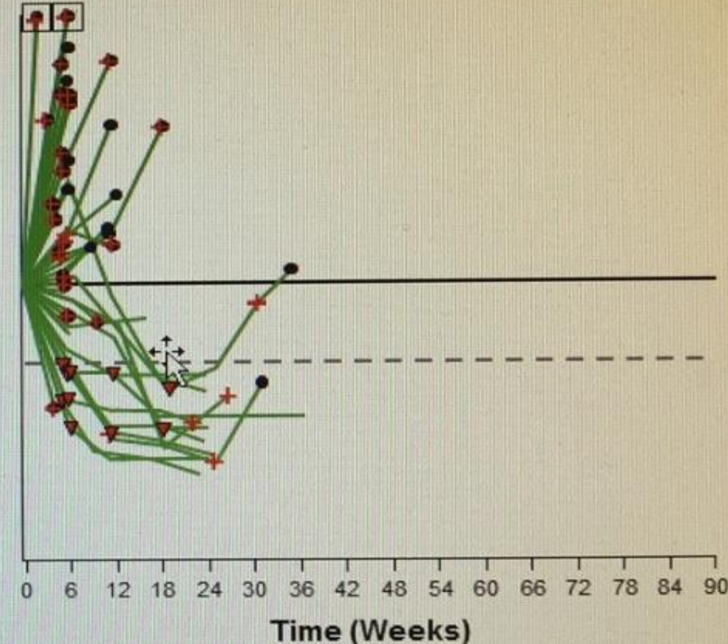
Clinical Trials Small Cell Lung Ca

- Extensive stage
  - Maintenance trial BMS check mate 0451 closed
  - Second line chemotherapy with a biological open
- Extensive stage maintenance after first line therapy novel drug biological close to open
- Please visit WRCC Clinical Trial booth

Nivolumab +/- Ipilimumab in Recurrent SCLC: Kinetics of Response







▼ Confirmed PR or CR + First occurrence of new lesion ● Patients off treatment □ % change truncated to 100%

LUNG CANCER: PALLIATIVE RADIATION TREATMENT FOR BETTER QUALITY OF LIFE AND MORE

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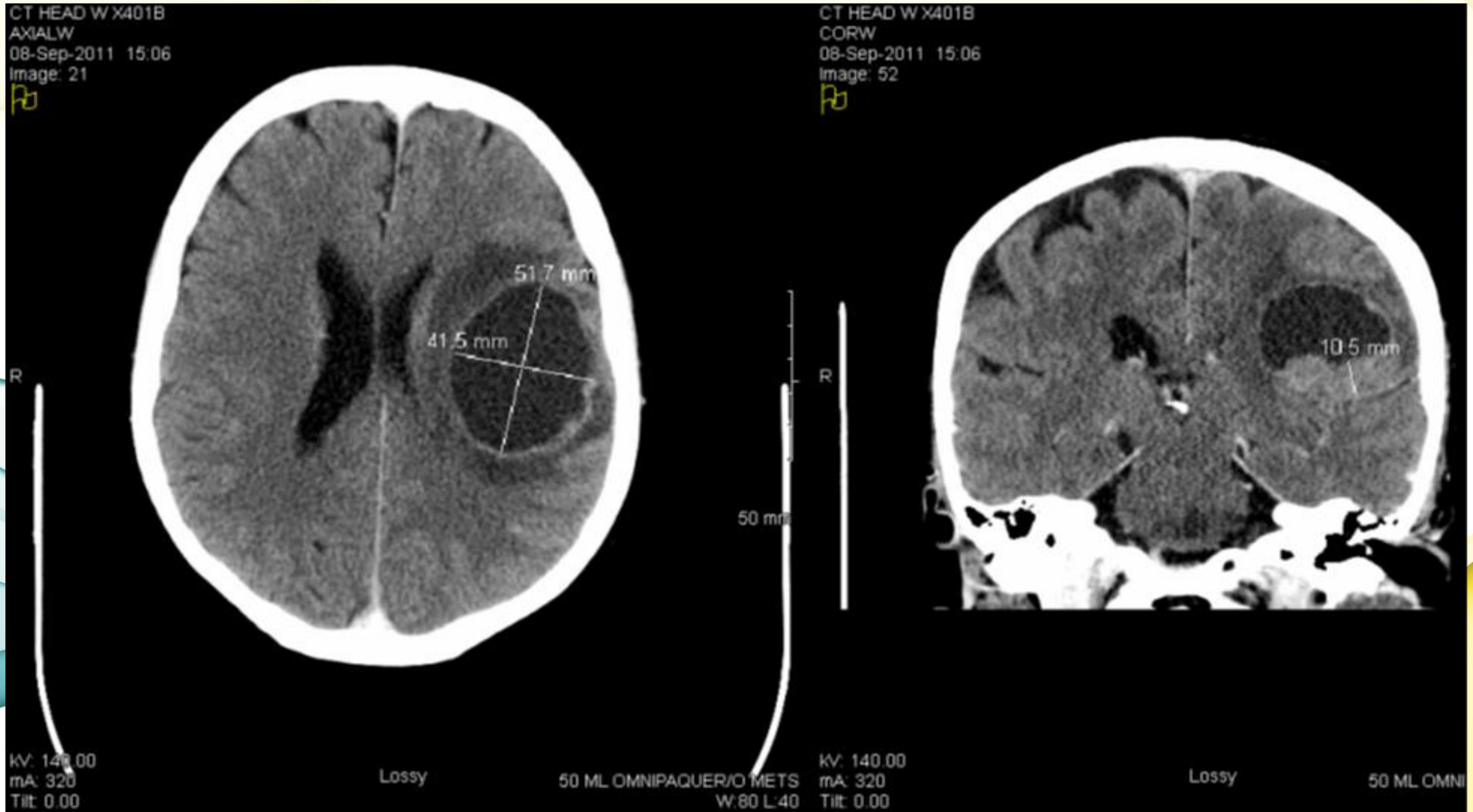
Case #2

- A 72-year-old lady came to ER in Sept 2011
- Hx of ovarian cancer diagnosed 29 years ago
- Severe neurological symptoms: headache, confusion, right-sided weakness.

- What test do you order?
  - 1. CXR;
  - 2. CT head;
  - 3. MRI of head;
  - 4. CBC, SMA 7;
  - 5. CA 125.

Case #2



Case #2

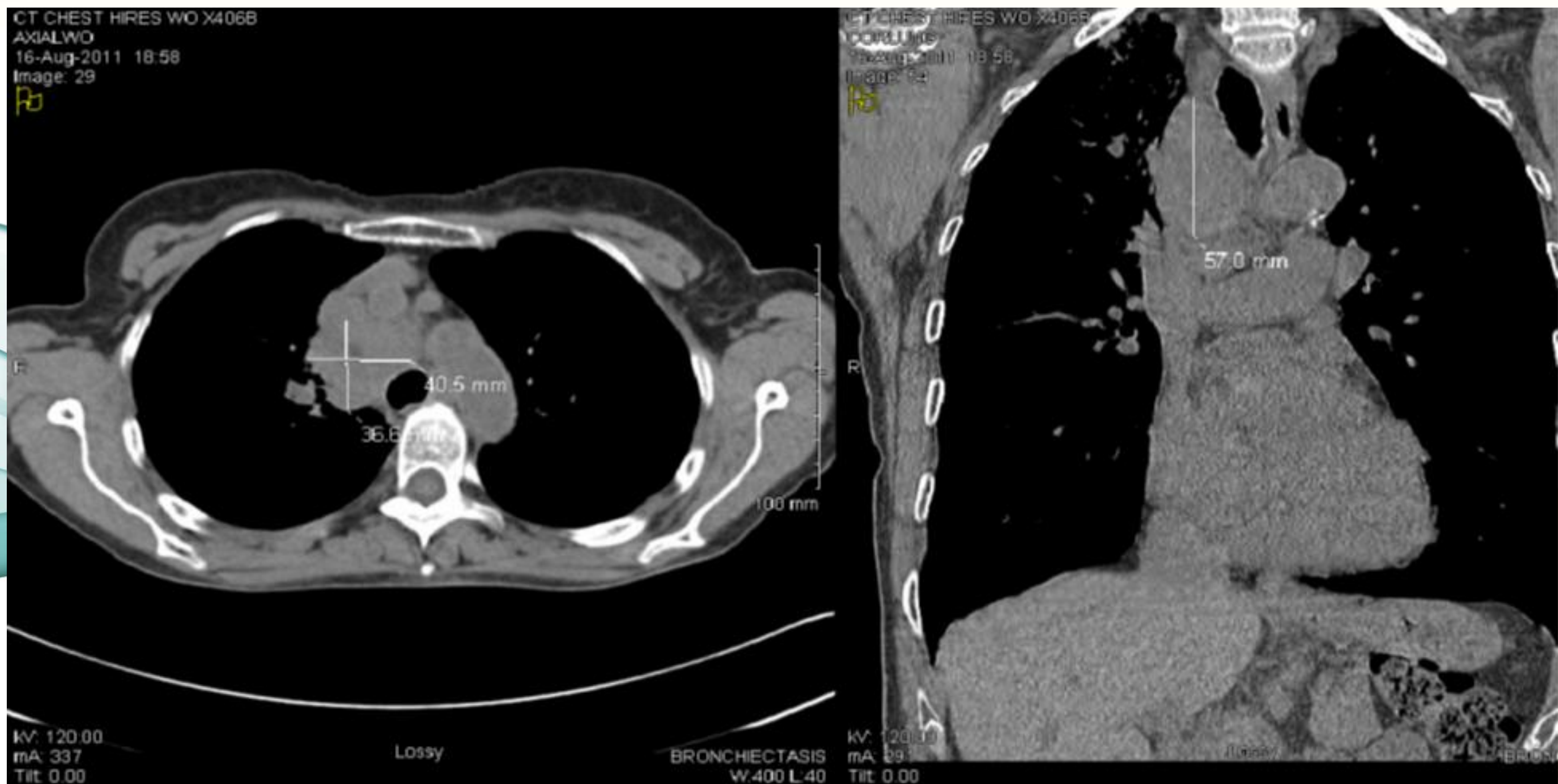
- **What's the most likely diagnosis?**
  - **1. Gliobastoma multiforme(GBM);**
  - **2. Intracranial bleeding;**
  - **3. Brain abscess;**
  - **4. Metastasis from ovarian cancer;**
  - **5. Metastasis from other cancer.**

Case #2

- What do you do next?
  - 1. Craniotomy;
  - 2. CBC, SMA-12, blood culture;
  - 3. CXR;
  - 4. Consult Radiation Oncology;
  - 5. Consult Medical Oncology.

Case #2

- On further questioning, her GP ordered a CT chest for shortness of breath last month.



Case #2

- **What's the most likely diagnosis?**
  - **1. COPD exacerbation;**
  - **2. Pneumonia with brain abscess;**
  - **3. Primary lung cancer with brain mets;**
  - **4. Metastasis from ovarian cancer;**
  - **5. Metastasis from other cancer.**

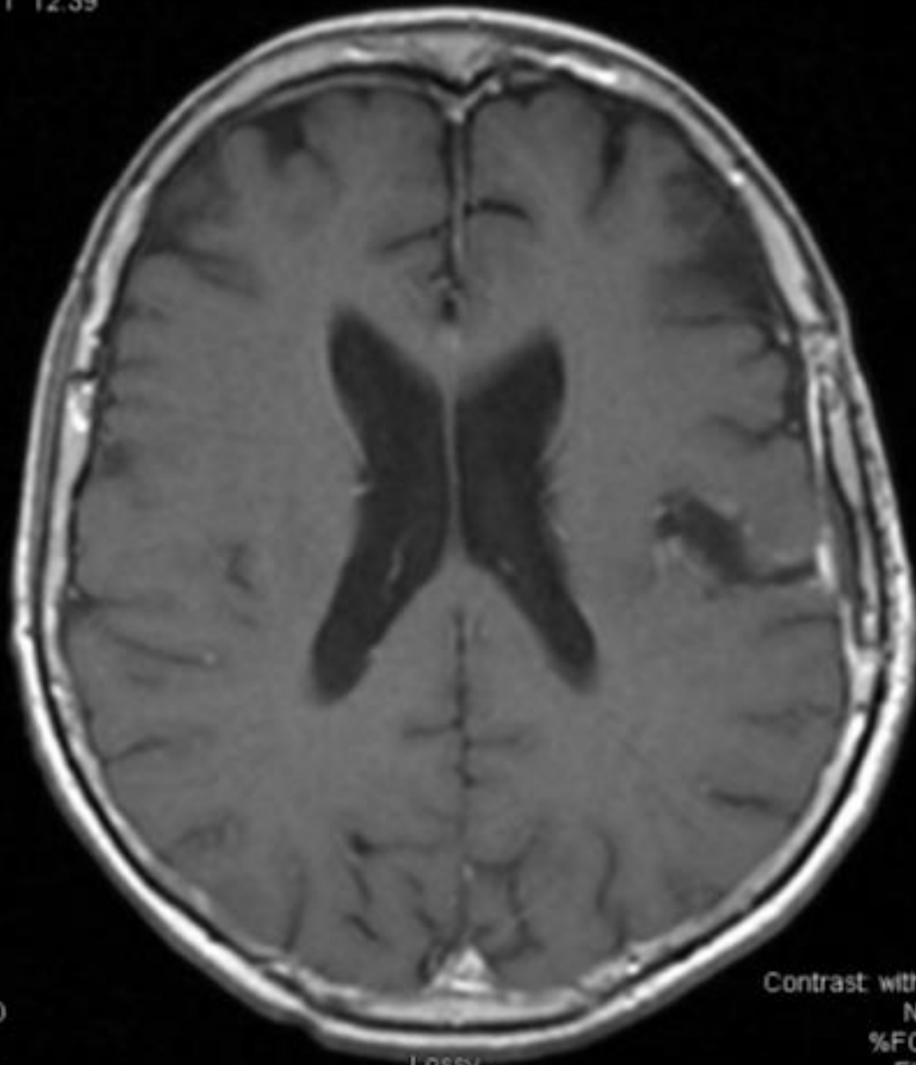
Case #2

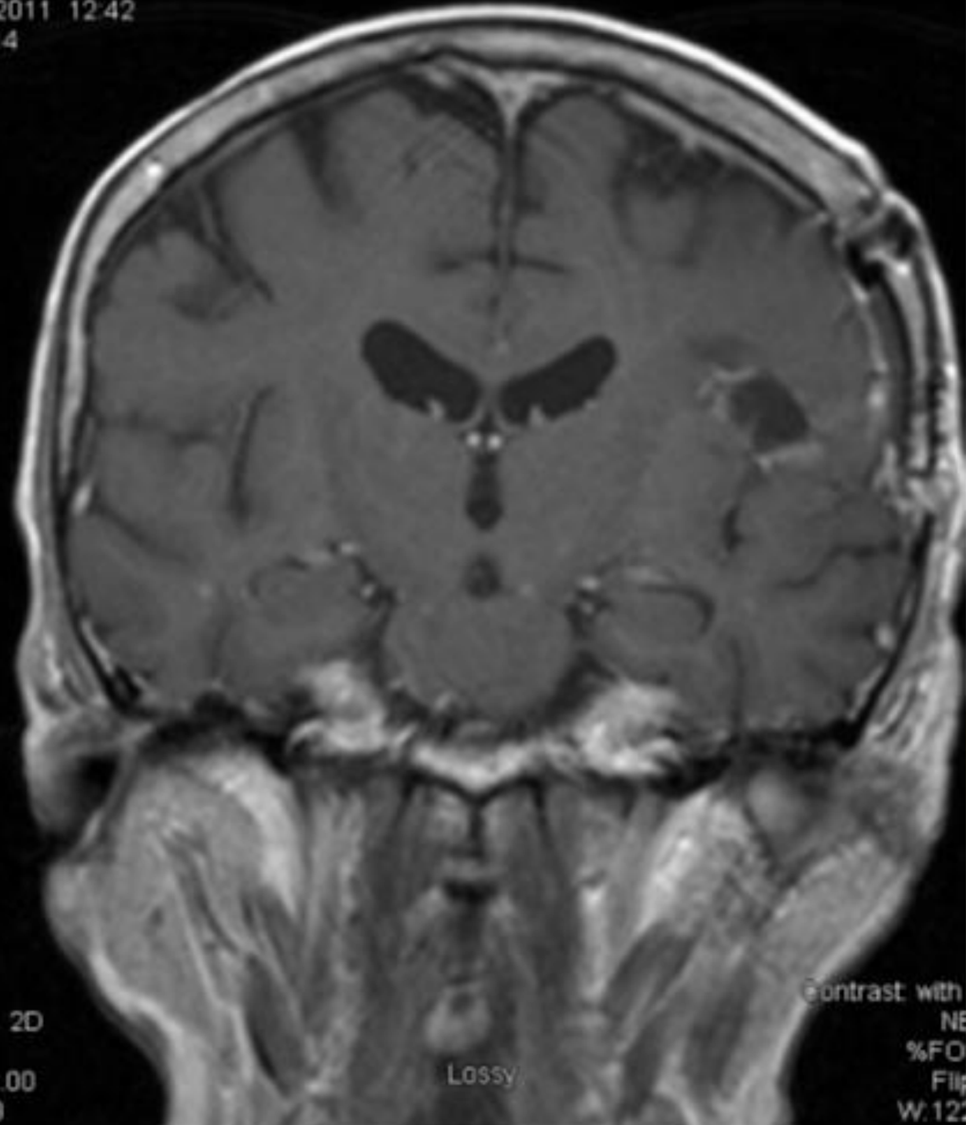
- Craniotomy was done for neurological symptoms on September 11, 2011
- Pathology confirmed extensive stage small cell lung cancer with 5.1cm brain metastasis.
- What's the next step?
  - 1. Chemo with cisplatine and VP-16;
  - 2. Chemo-radiation to lung mass and lymph nodes;
  - 3. Bronchoscopy with EBUS biopsy;
  - 4. EBRT alone to lung and mediastinal nodes;
  - 5. Whole brain irradiation.
  - 6. PET scan.

Case #2

- She received WBI 2,000cGy/5fr.
- Remained in hospital as inpatient due to poor KPS.
- What's the next step?
  - 1. Chemo with cisplatine and VP-16 for 4 cycles;
  - 2. Chemo-radiation 6,000cGy/30fr to lung mass and lymph nodes;
  - 3. CT or MRI of brain;
  - 4. EBRT 2,000cGy/5fr alone to lung and mediastinal nodes;
  - 5. Hospice.

Case #2





Case #2

- She received WBI 2,000cGy/5fr.
- MRI showed complete response in brain.
- Discharged home.
- What's the next step?
  - 1. Chemo with cisplatine and VP-16 for 4 cycles;
  - 2. Chemo-radiation 6,000cGy/30fr to lung mass and lymph nodes;
  - 3. Rehab;
  - 4. EBRT 2,000cGy/5fr alone to lung and mediastinal nodes;
  - 5. Hospice.

Case #2

- Chemo with cisplatine and VP-16 for 4 cycles.
- CT showed partial remission in the chest with 2.5cm upper mediastinal lymph node.
- What's the next step?
  - 1. CT or MRI of brain;
  - 2. Radiation 5,000cGy/25fr to mediastinum;
  - 3. Follow up with CT chest in 3 months;
  - 4. EBRT 2,000cGy/5fr alone to lung and mediastinal nodes;
  - 5. Hospice.

Case #2

CT CHEST/ABD W PNL
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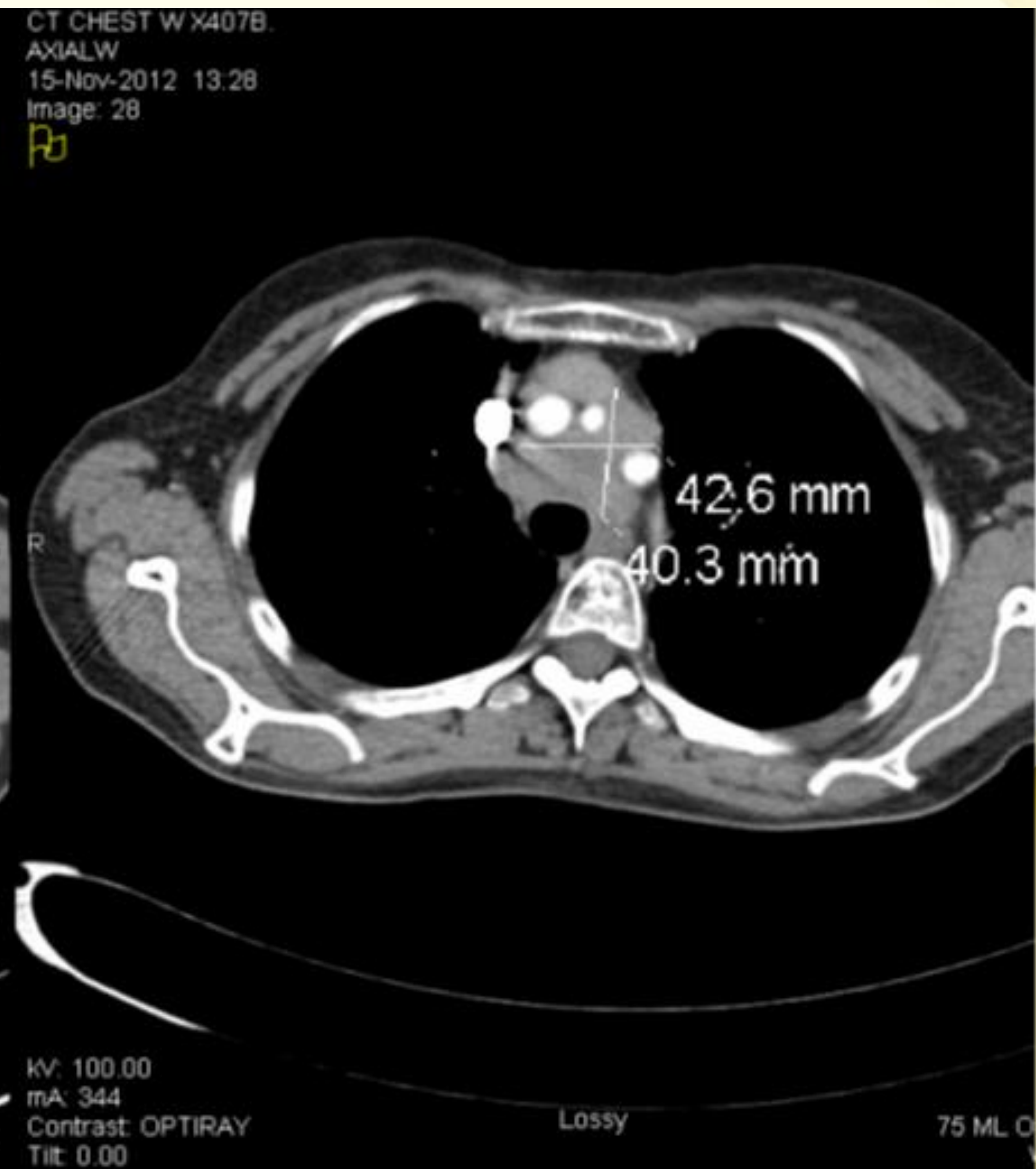

Case #2

- **CT showed recurrence in the chest Nov 2012.**
- **What's the next step?**
  - **1. Chemo with cisplatine and VP-16 for 4 cycles;**
  - **2. Try 2nd line chemo;**
  - **3. Radiation 5,000cGy/25fr to mediastinum;**
  - **4. EBRT 2,000cGy/5fr alone to lung and mediastinal nodes;**
  - **5. EBRT 3,000cGy/10fr alone to lung and mediastinal nodes.**

Case #2

- We offered her higher dose palliative radiation to the primary cancer and right hilar/mediastinal lymph nodes 3,000 cGy in 10 fractions over two weeks with the last dose on January 30, 2013.
- F/U CT showed CR with no evidence of any metastasis.
- What's the next step?
  - 1. Chemo with cisplatine and VP-16 for 4 cycles;
  - 2. Try 2nd line chemo;
  - 3. F/U with CT chest/brain in 3 months;
  - 4. F/U with CT chest in 3 months;
  - 5. F/U with CT chest in 6 months.

Case #2

- She had no symptoms or signs of recurrence 3 years after diagnosis of brain mets. F/U CT continued to show CR with no evidence of any metastasis.
- What's the next step?
  - 1. F/U with no CT imaging in 6 months;
  - 2. Discharge to GP;
  - 3. F/U with CT chest/brain in 6 months;
  - 4. F/U with CT chest in 6 months;
  - 5. F/U with CT chest in 12 months.

Case #2

Thorax^WRH_CHEST_WITHOUT (Adult)
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09-May-2017 12:20
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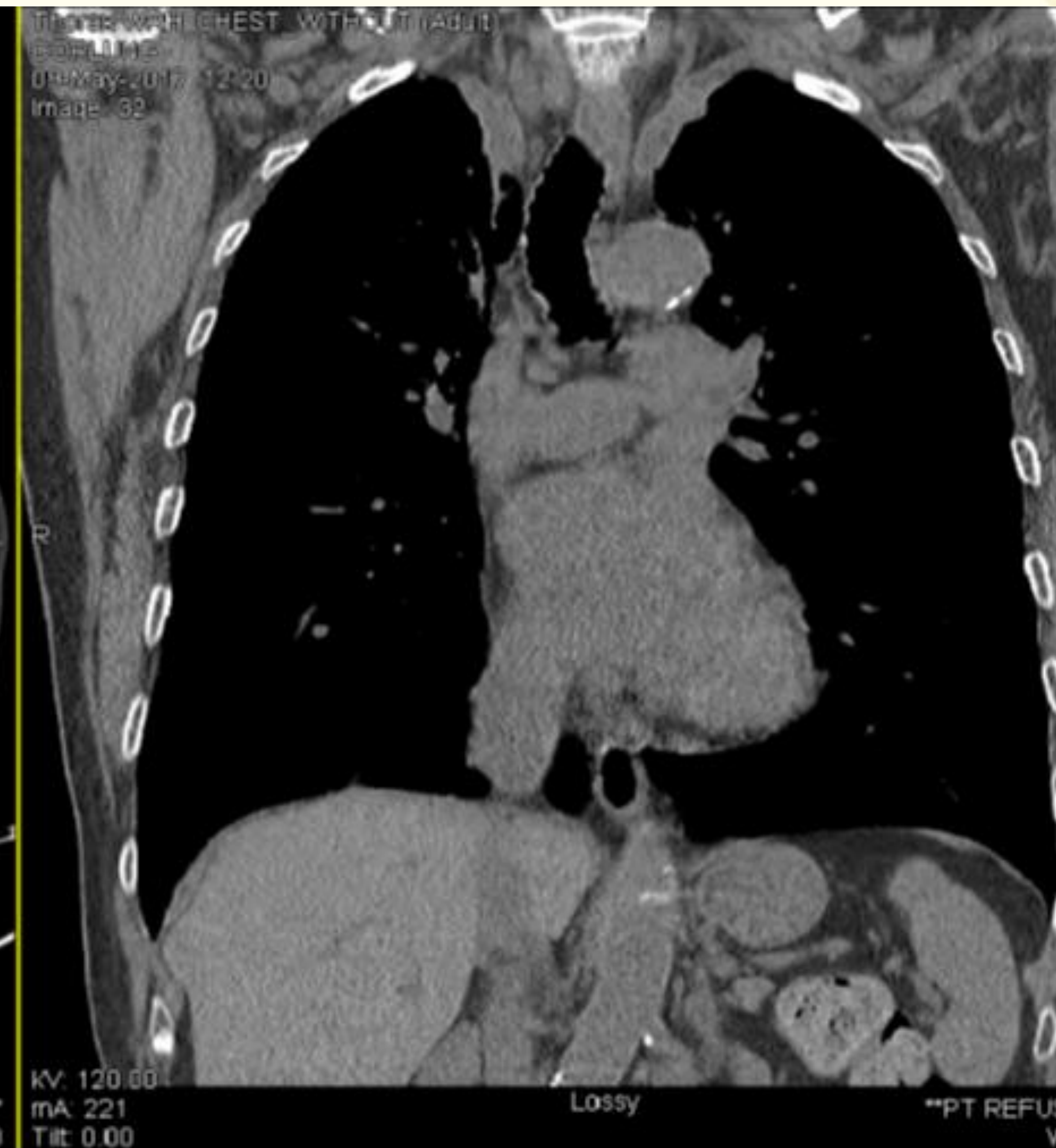
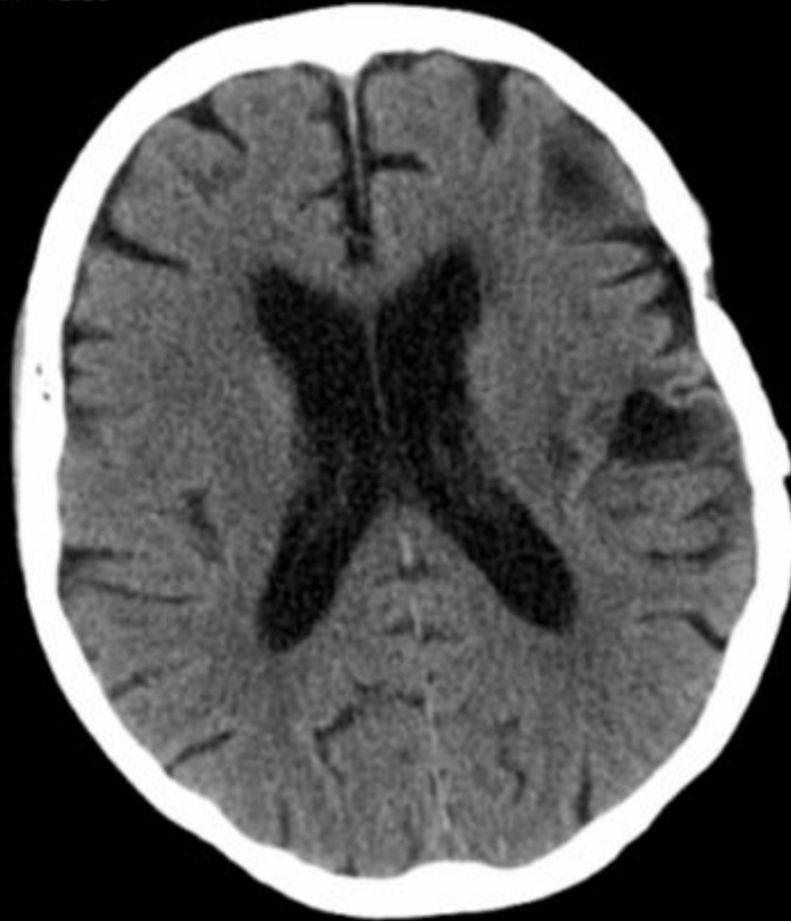
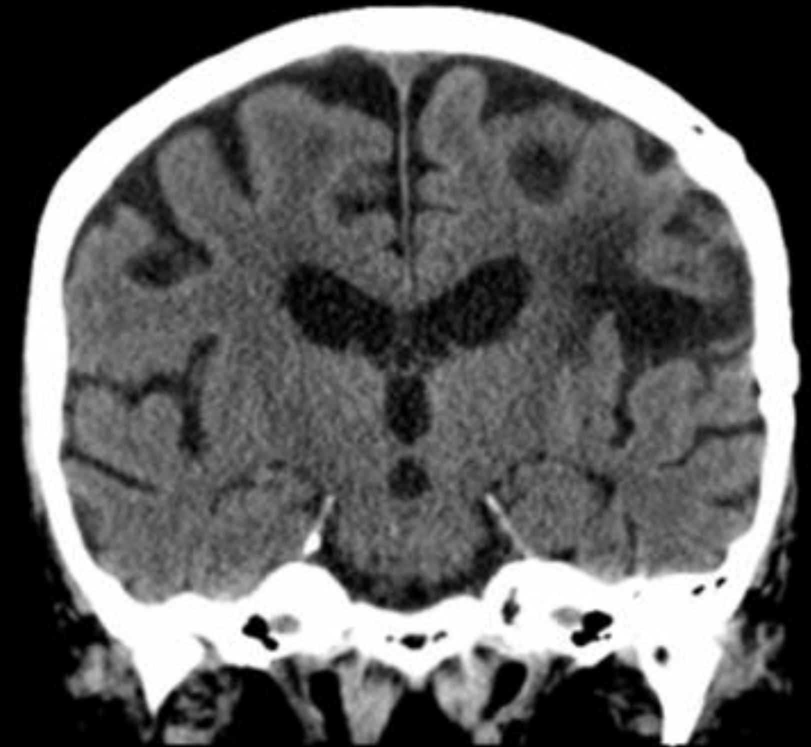
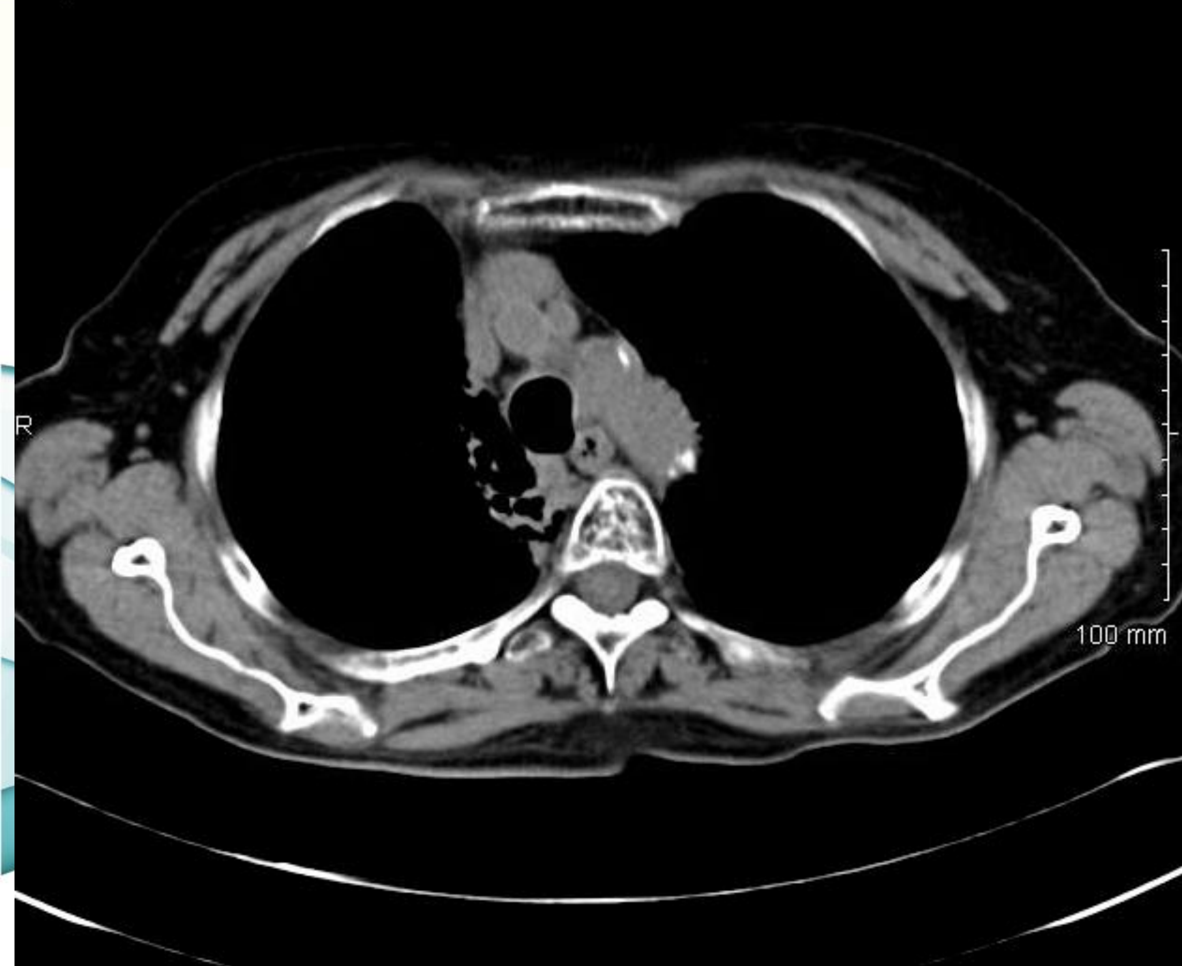


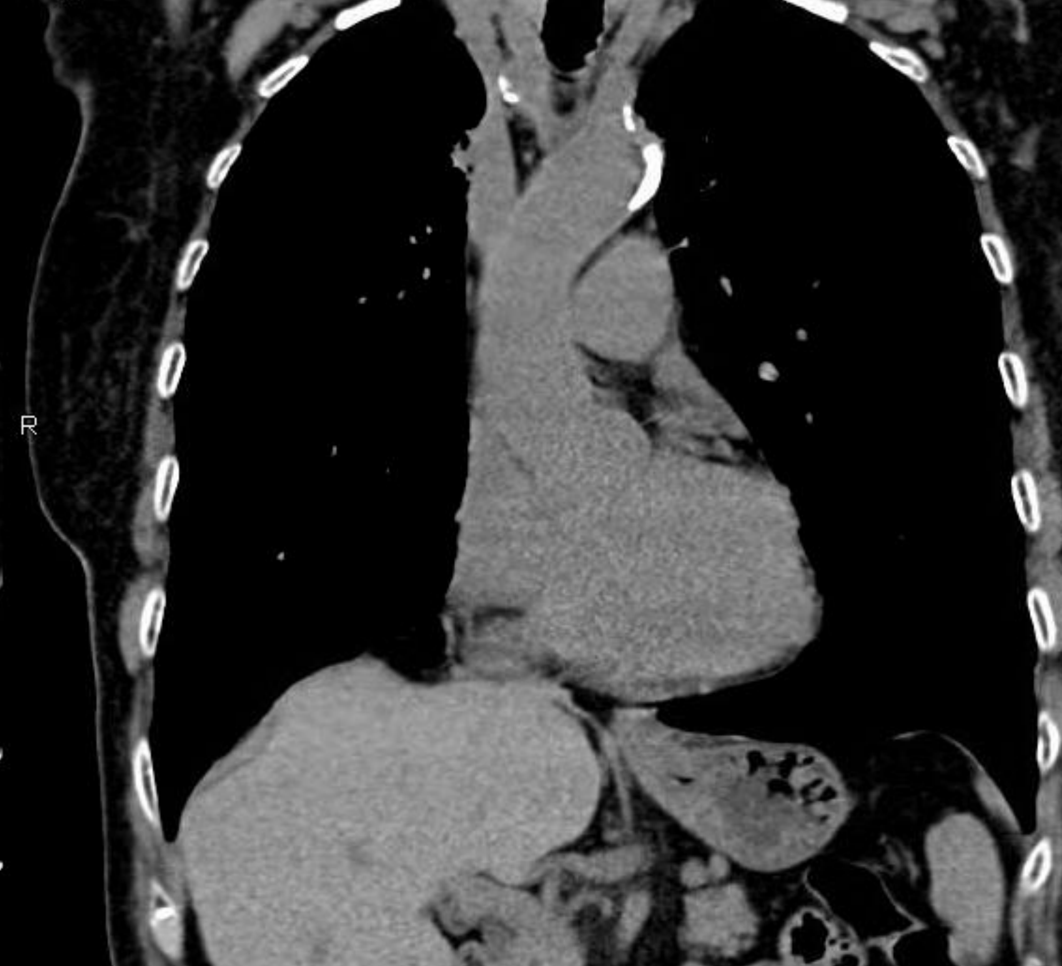
Case #2





Case #2





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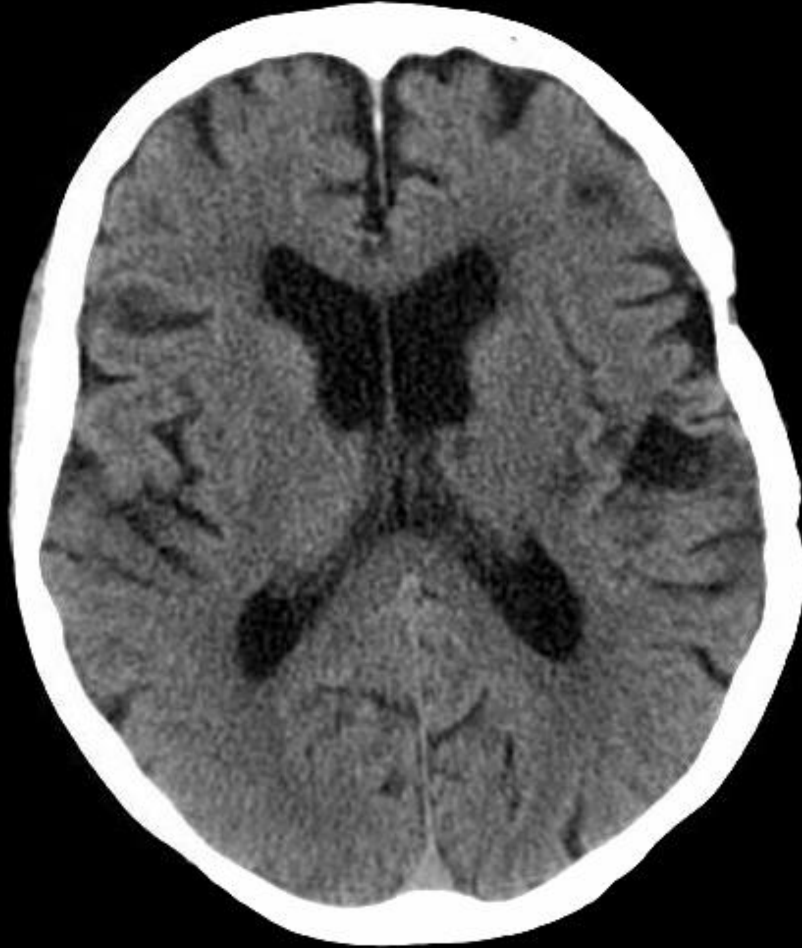

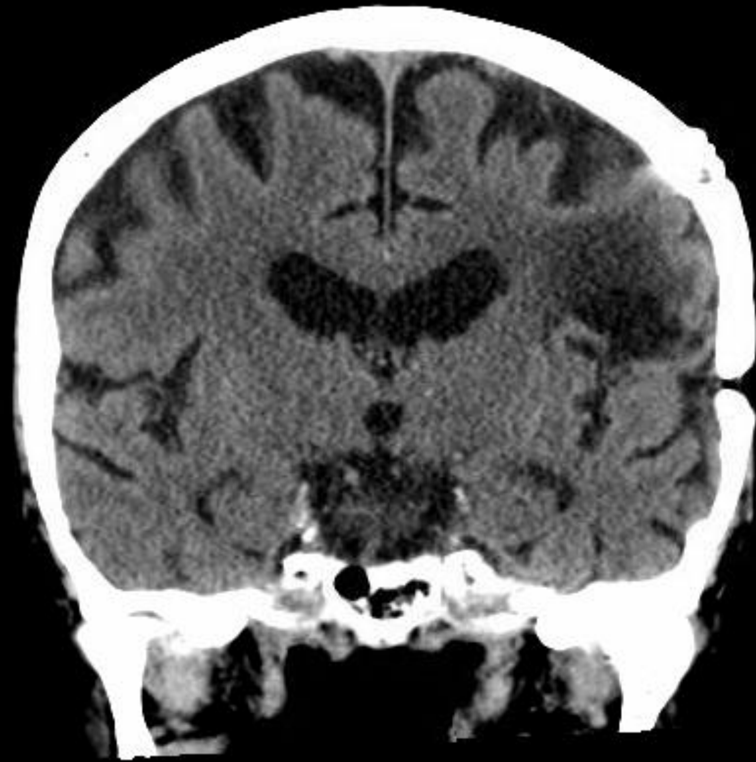

Conclusion

- **If you have a terminal stage lung cancer patient, please remember it is never too late to make a referral to Radiation Oncology service.**

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Thank you!

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