PNEUMOMEDICINA 2022

Milano, 26 - 28 maggio 2022 · Centro Congressi Palazzo delle Stelline

Strani noduli polmonari

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Anamnesi

- Donna di 79 anni
- BMI 25
- Non storia di tabagismo
- Non intolleranze farmacologiche
- Ha lavorato in maglieria
- Due gravidanze a termine
- Anamnesi familiare negativa (asma, atopia)

Anamnesi patologica remota

- Ipertensione arteriosa sistemica
- Osteoporosi
- Dislipidemia
- Emicrania
- Calcolosi della colecisti
- Isterectomia per fibromatosi
- Asma bronchiale

Anamnesi patologica prossima

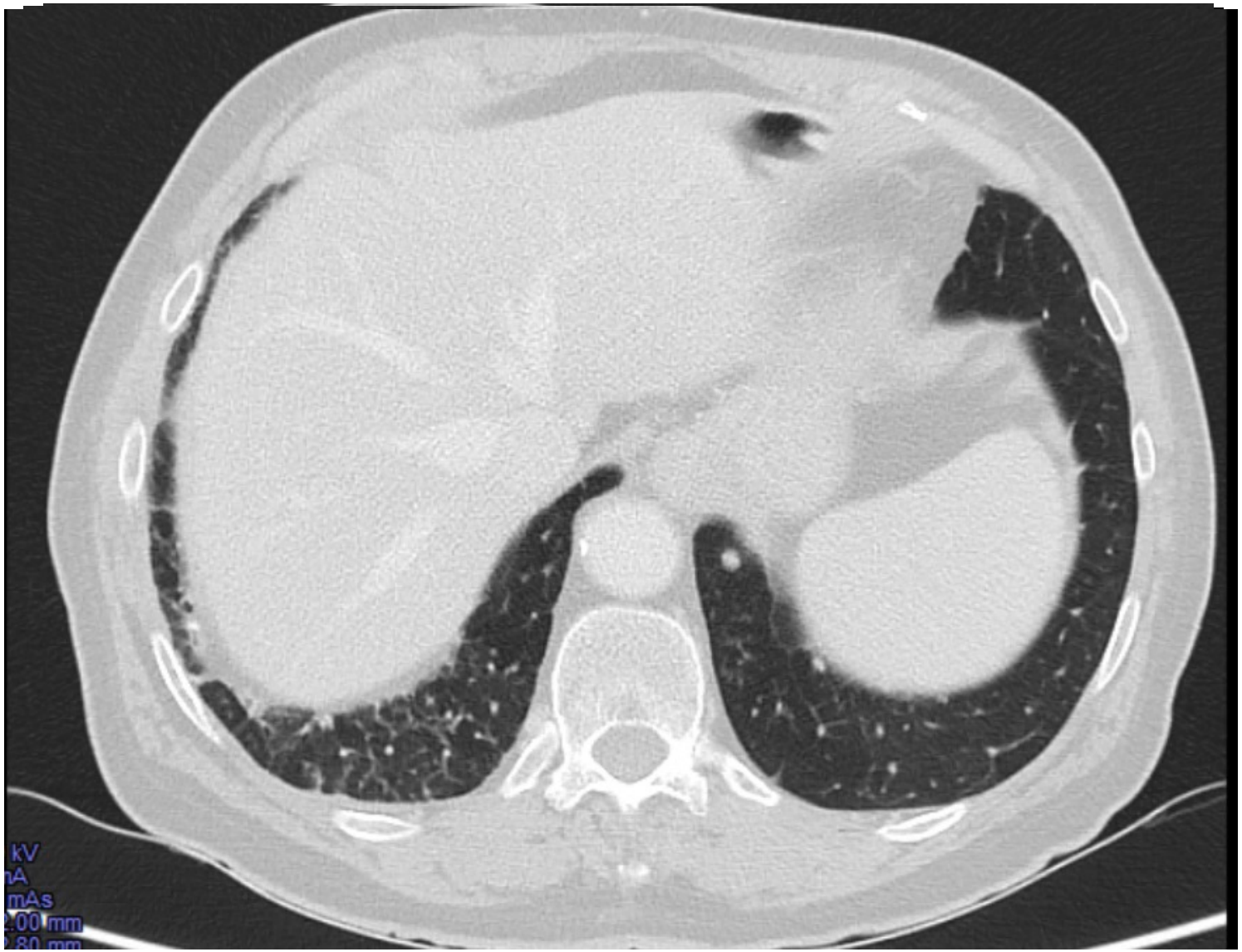
- Tosse cronica, secca, accessionale e dispnea per sforzi moderati-intensi
- PFR: FEV1 0,91 - 68%

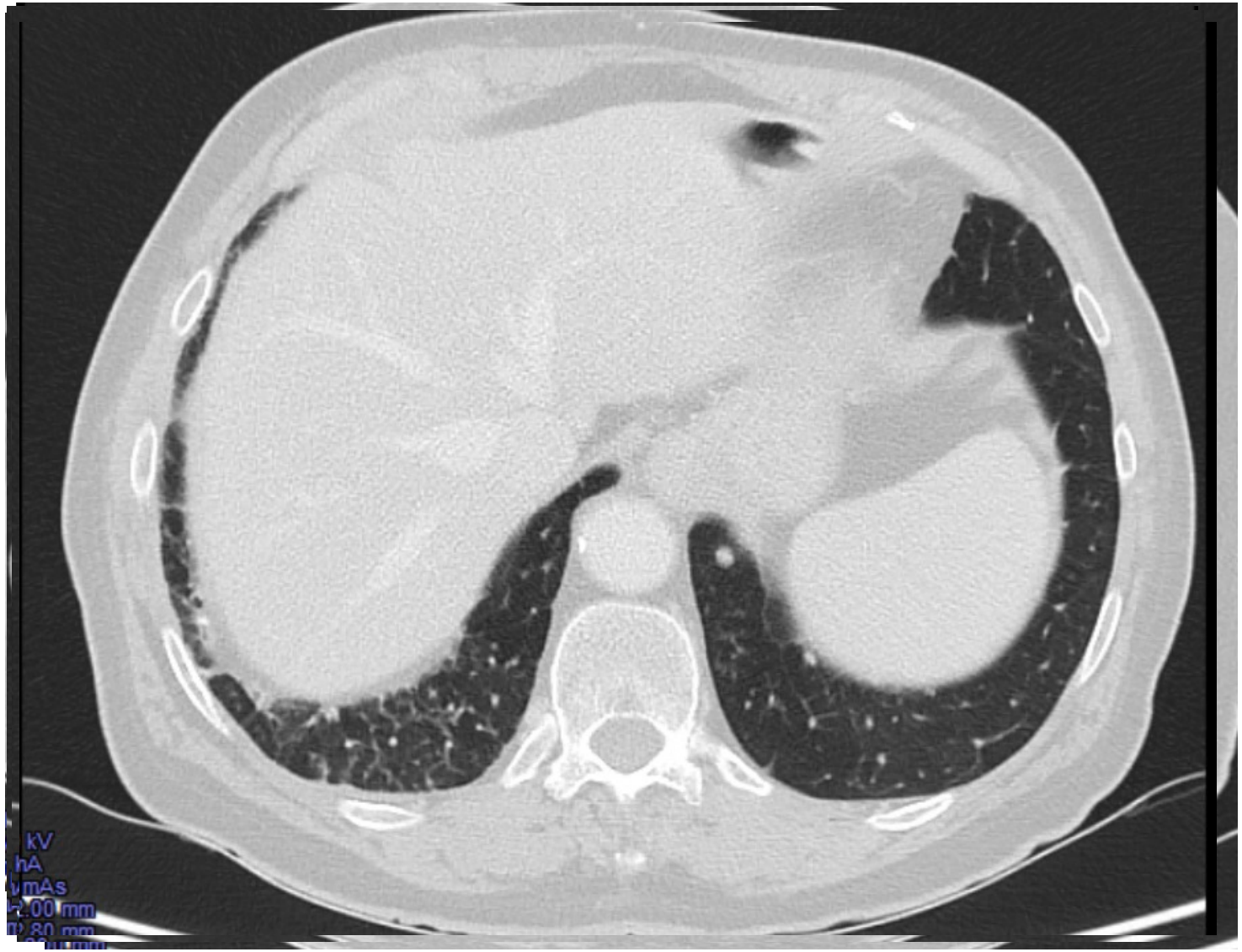
  FVC 1,6 - 94%

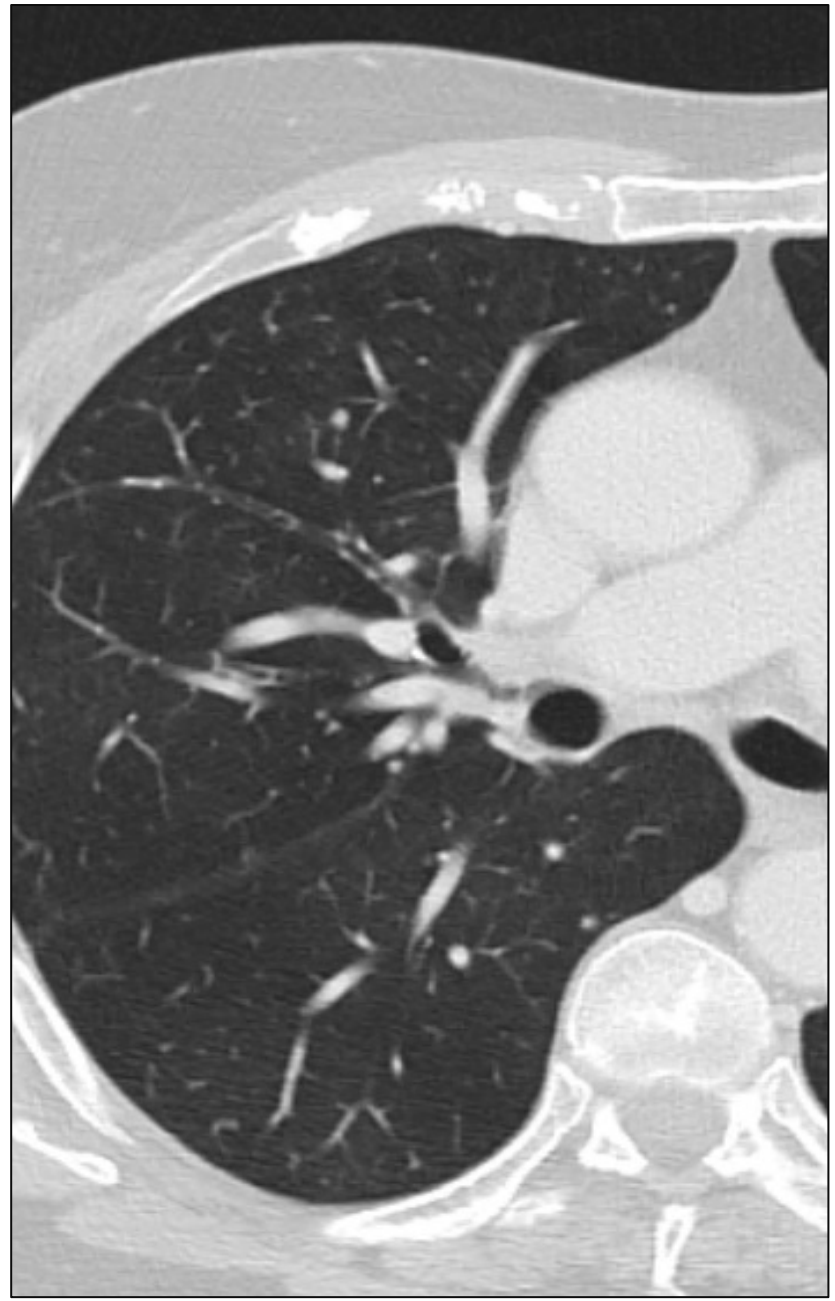
  Tiffenau 57

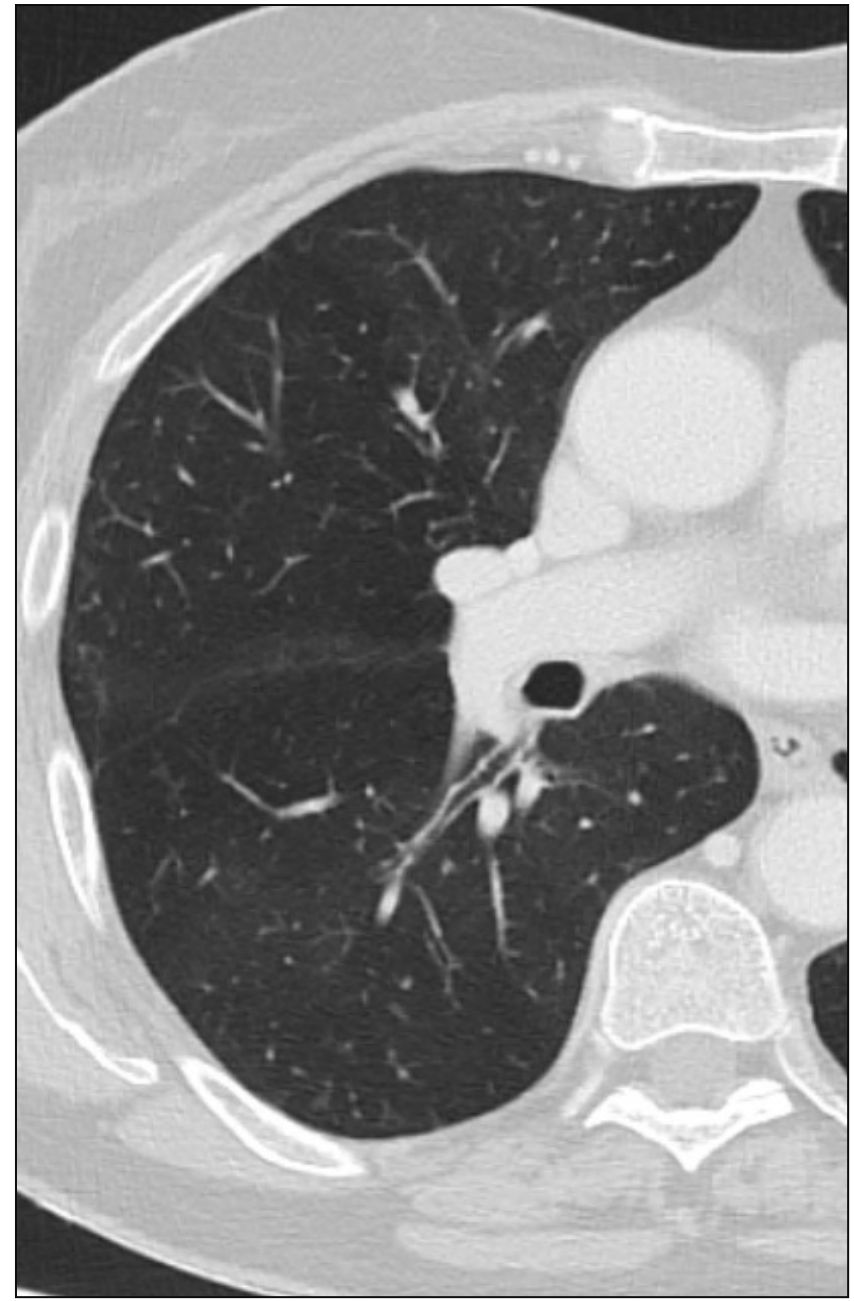
  DLCO 17,5 - 80%
- Viene per un secondo parere (maggio2018)

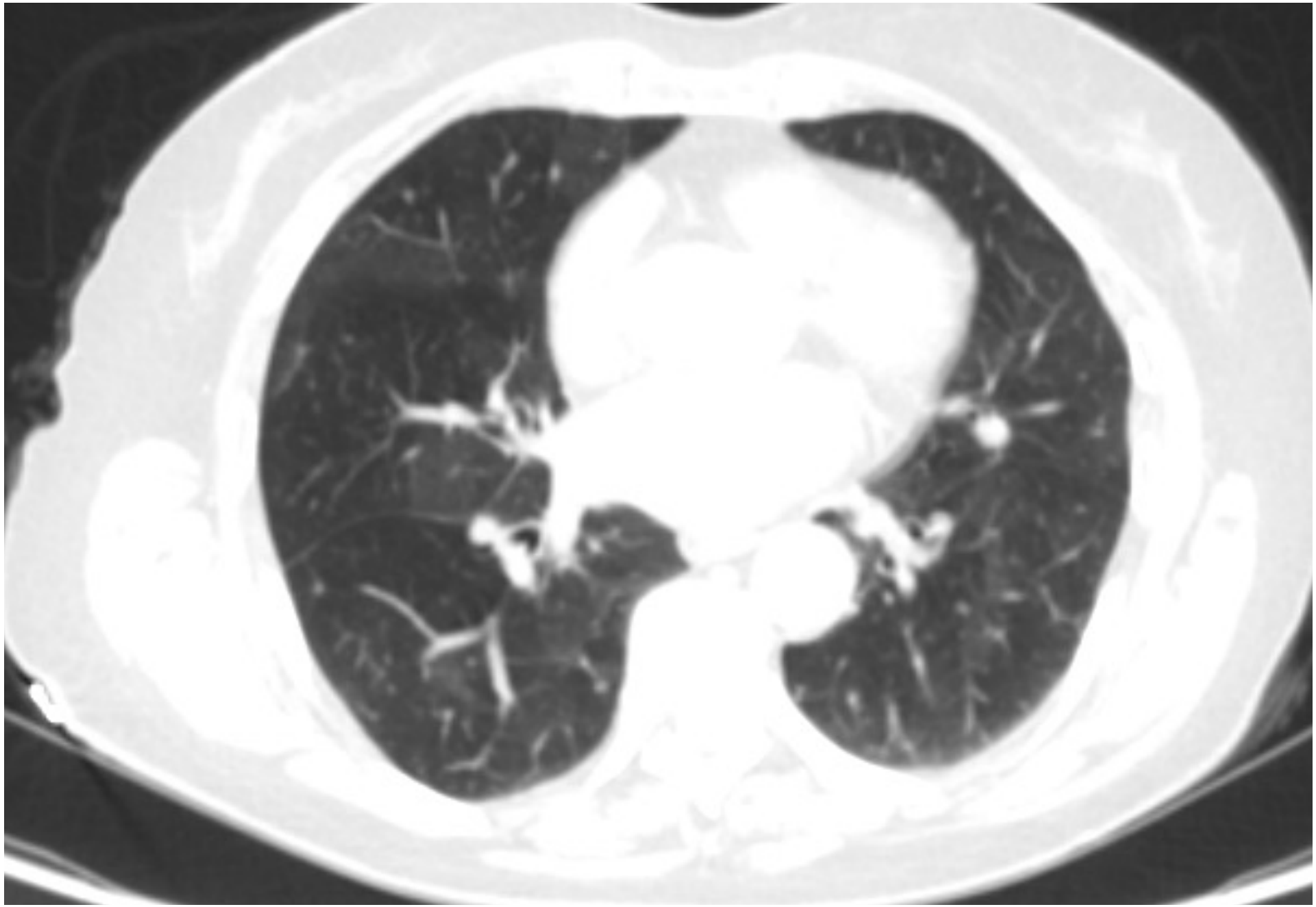
TC torace



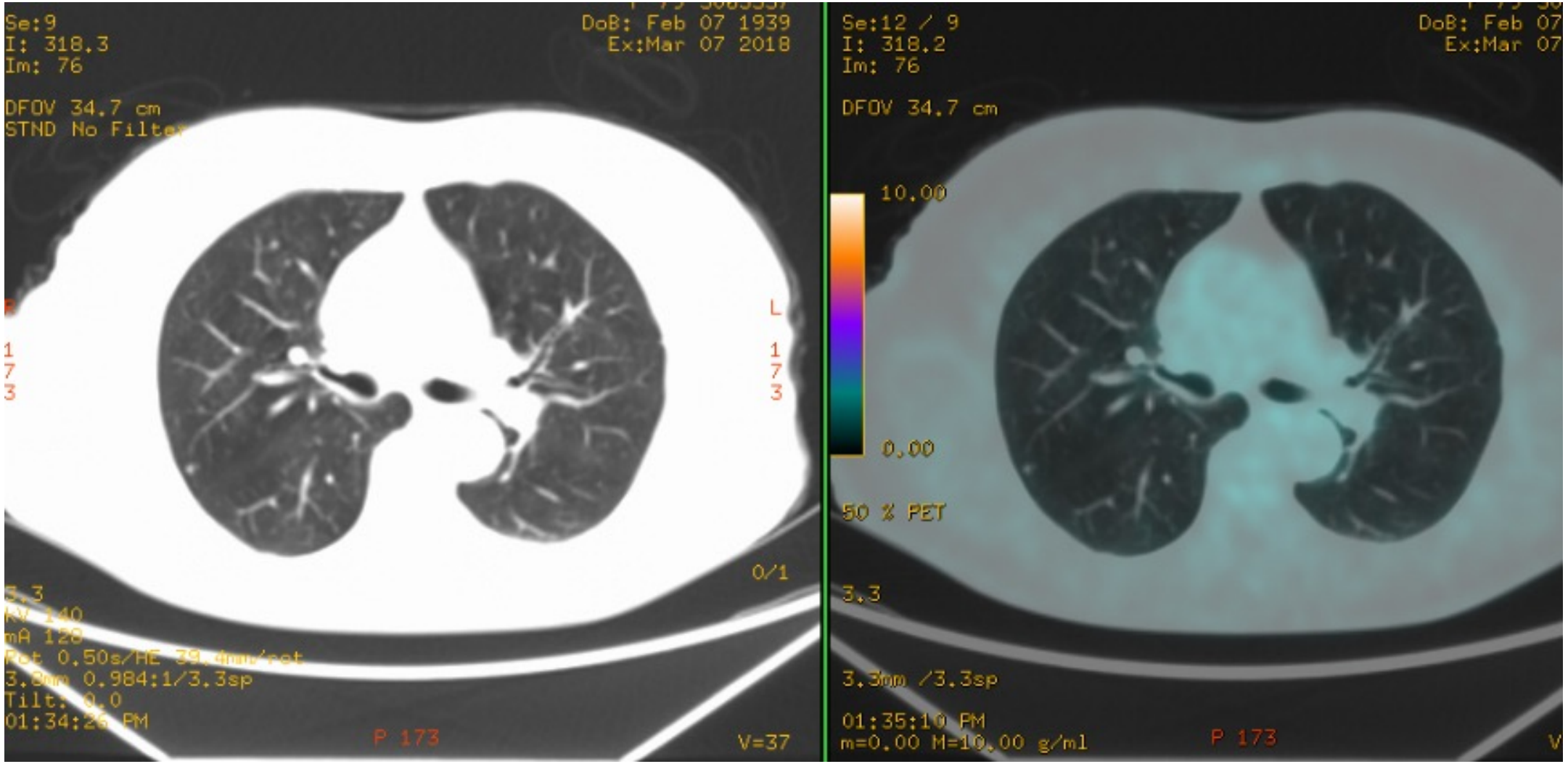

kV
hA
mAs
2.00 mm
0.80 mm

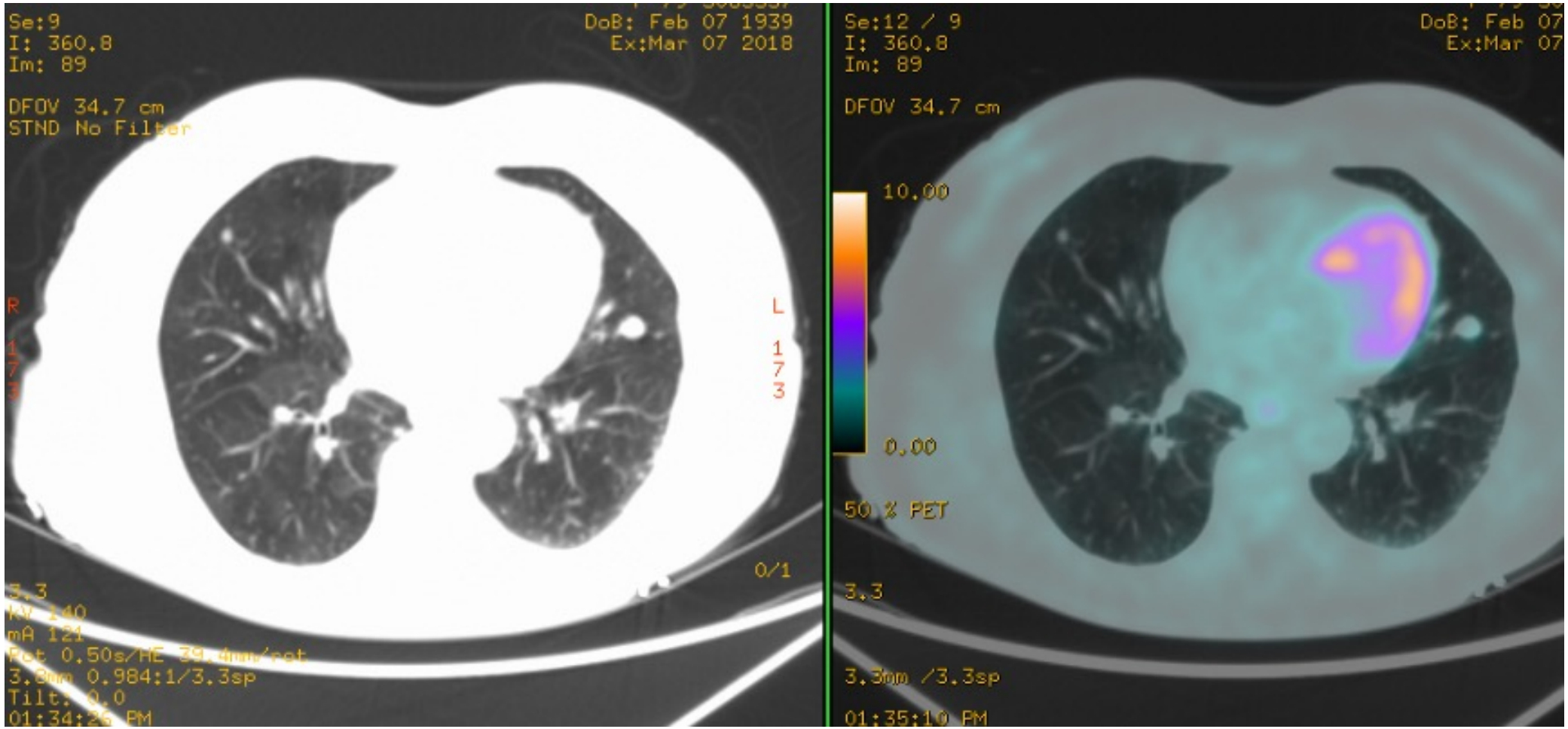


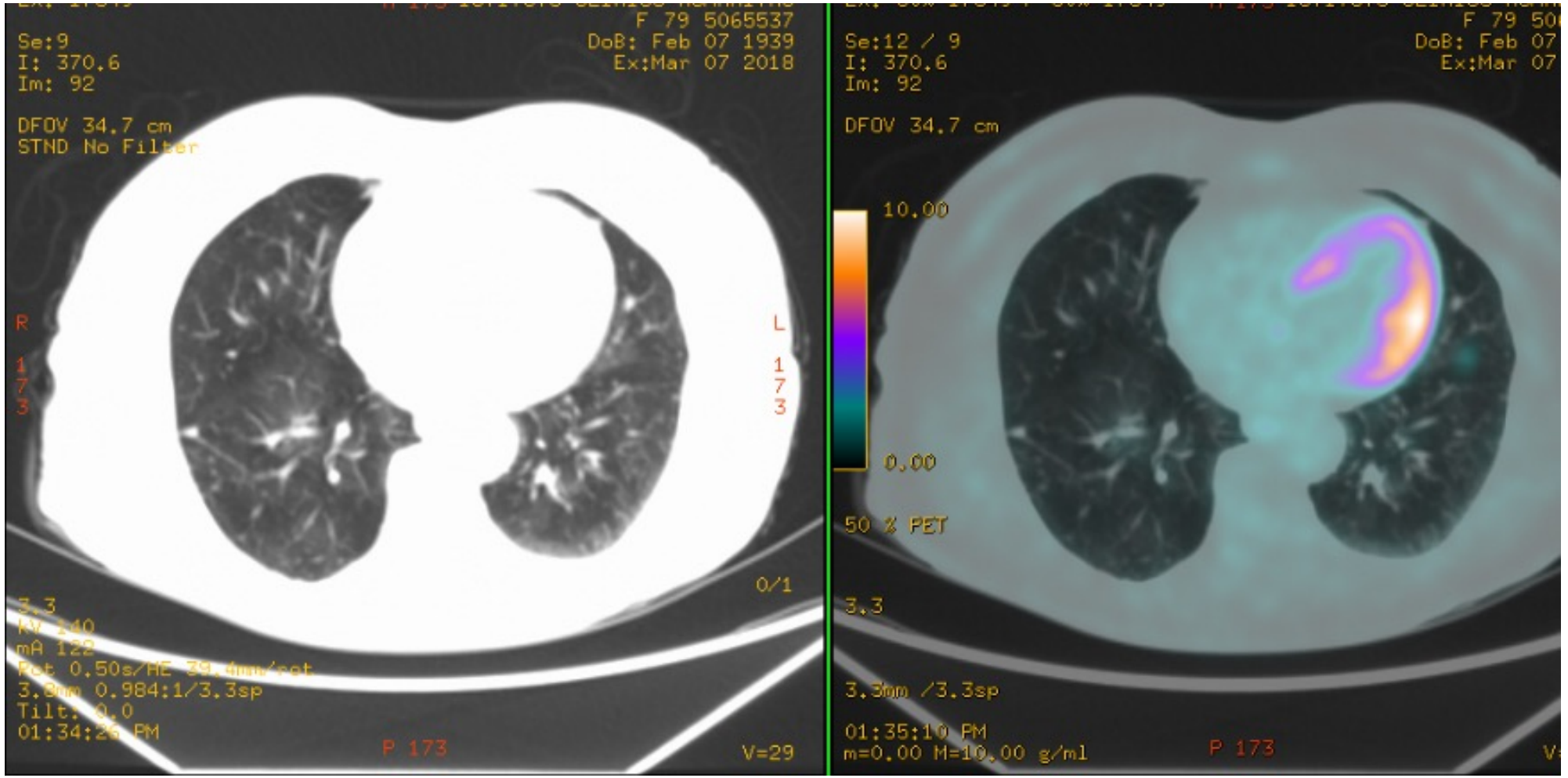


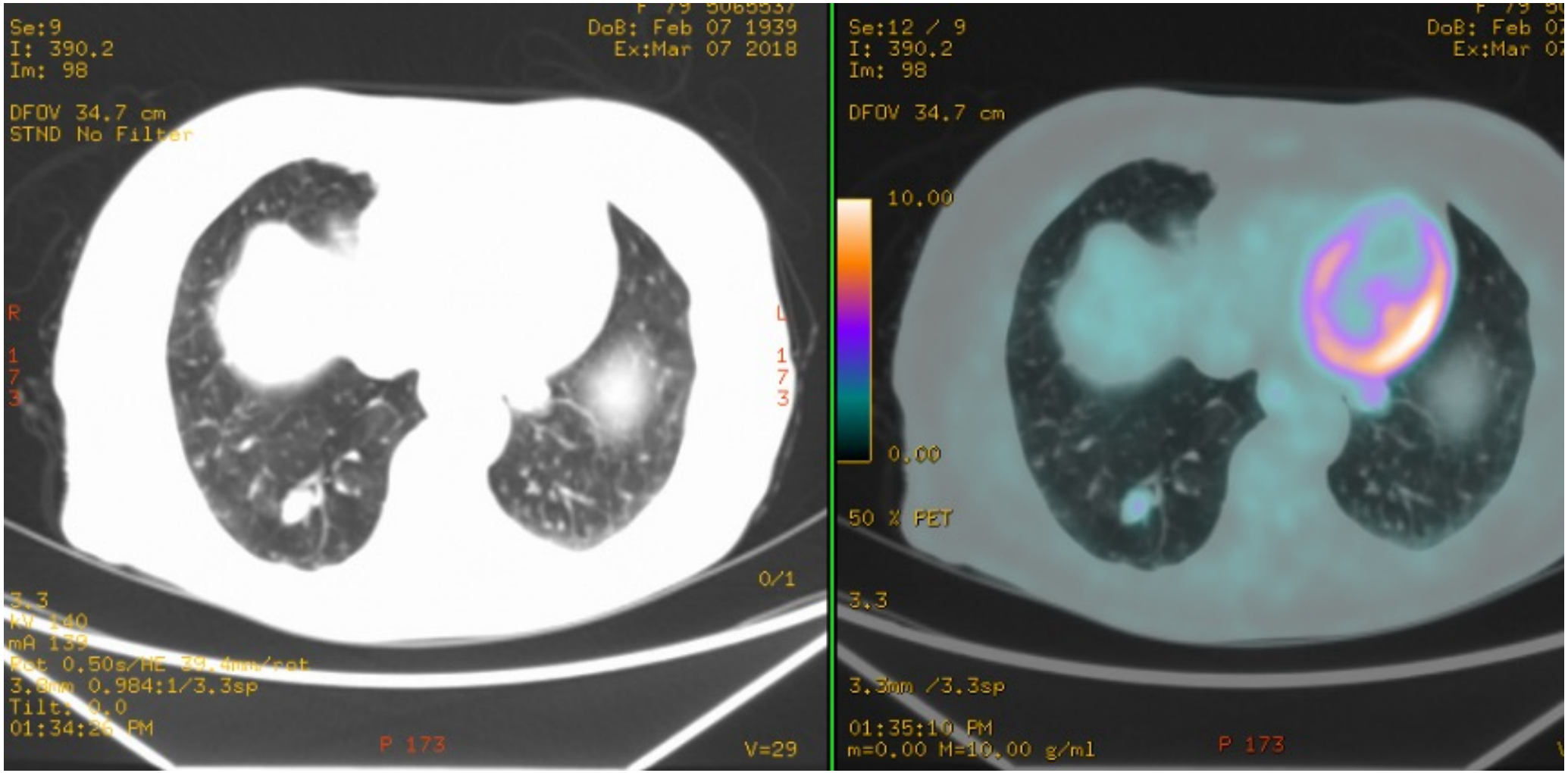


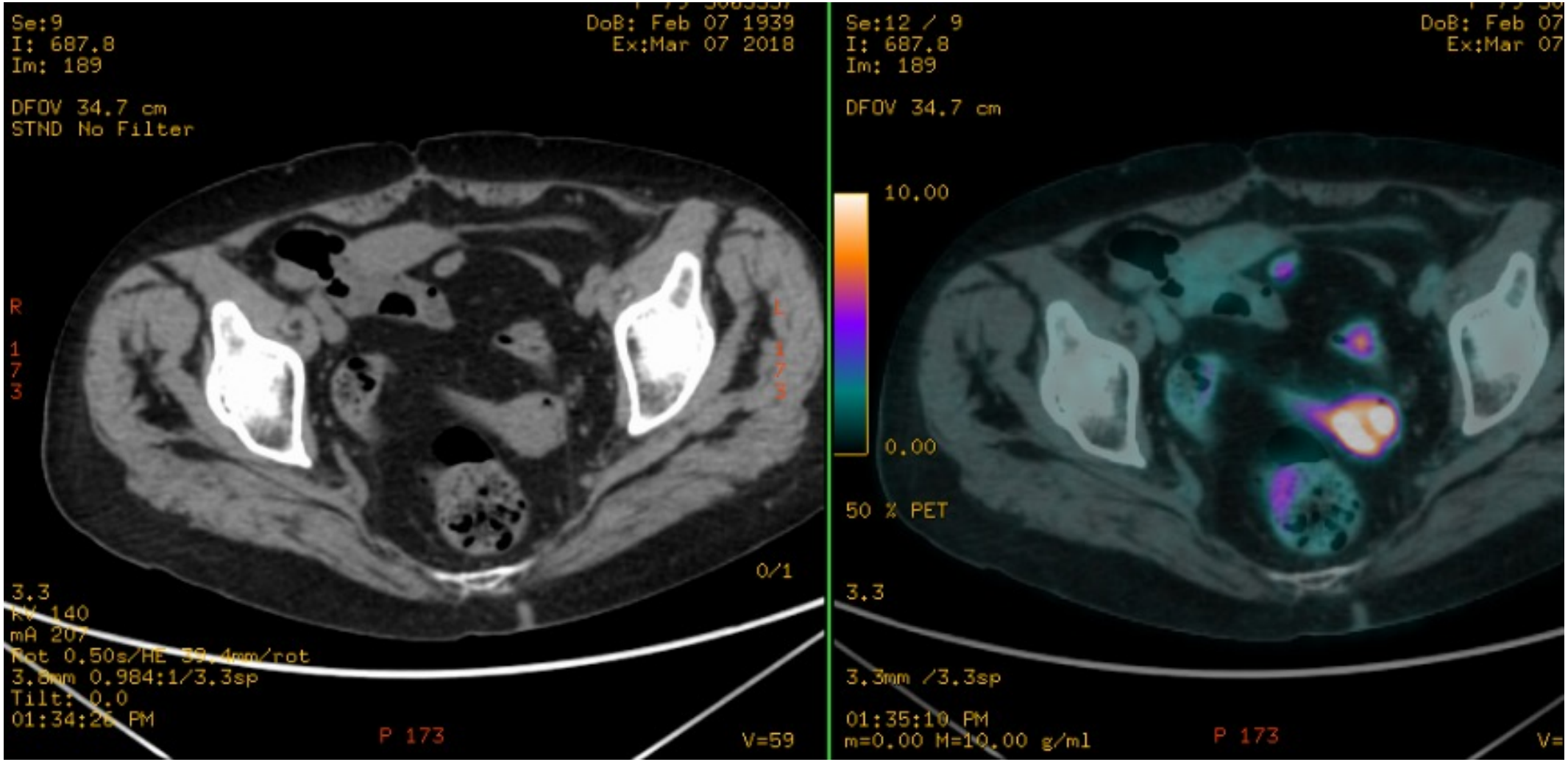
PET TB 18F-FDG



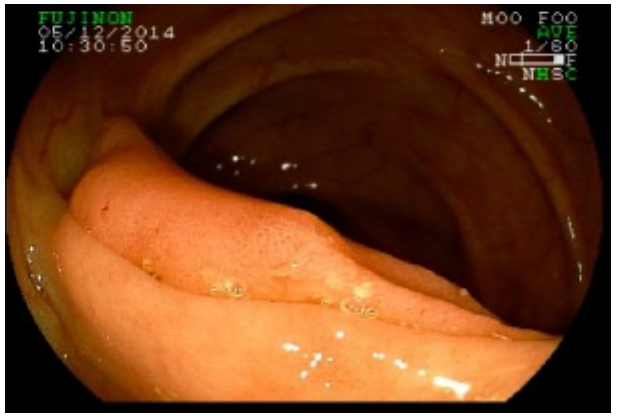

Se:9
I: 360.8
Im: 89
DoB: Feb 07 1939
Ex:Mar 07 2018
DFOV 34.7 cm
STND No Filter
R
L
0/1
3.3
kV 140
mA 121
Tilt: 0.0
Se:12 / 9
I: 360.8
Im: 89
DoB: Feb 07
Ex:Mar 07
DFOV 34.7 cm
10.00
0.00
50 % PET
3.3
3.3mm /3.3sp


F 79 5065537
Se:9
DoB: Feb 07 1939
I: 370.6
Ex:Mar 07 2018
Im: 92
DFOV 34.7 cm
STND No Filter
R
L
173
173
0/1
3.3
kV 140
mA 122
Rot 0.50s/HE 39.4mm/rot
3.8mm 0.984:1/3.3sp
Tilt: 0.0
01:34:26 PM
P 173
V=29
F 79 50
Se:12 / 9
DoB: Feb 07
I: 370.6
Ex:Mar 07
Im: 92
DFOV 34.7 cm
10.00
0.00
50 % PET
3.3
3.3mm /3.3sp
01:35:10 PM
m=0.00 M=10.00 g/ml
P 173


Se:9
I: 390.2
Im: 98
DoB: Feb 07 1939
Ex:Mar 07 2018
DFOV 34.7 cm
STND No Filter
R
L
1
7
3
1
7
3
0/1
3.3
kV 140
mA 139
Rot 0.50s/HE 39.4mm/rot
3.8mm 0.984:1/3.3sp
Tilt: 0.0
01:34:26 PM
P 173
V=29
Se:12 / 9
I: 390.2
Im: 98
DoB: Feb 07
Ex:Mar 07
DFOV 34.7 cm
10.00
0.00
50 % PET
3.3
3.3mm /3.3sp
01:35:10 PM
m=0.00 M=10.00 g/ml
P 173

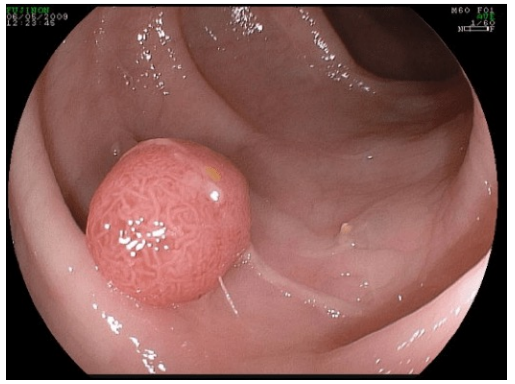

Se:9
I: 687.8
Im: 189
DoB: Feb 07 1939
Ex:Mar 07 2018
DFOV 34.7 cm
STND No Filter
R
173
L
173
0/1
3.3
kV 140
mA 207
Rot 0.50s/HE 39.4mm/rot
3.8mm 0.984:1/3.3sp
Tilt: 0.0
01:34:26 PM
P 173
V=59
Se:12 / 9
I: 687.8
Im: 189
DoB: Feb 07
Ex:Mar 07
DFOV 34.7 cm
10.00
0.00
50 % PET
3.3
3.3mm /3.3sp
01:35:10 PM
m=0.00 M=10.00 g/ml
P 173
V=

Colonscopia



- LST-NG (lateral spreading tumor non granulare di 15 mm a livello del cieco
- Voluminosa formazione polipoide di 45 mm a livello del sigma distale

- Mucosectomia + polipectomia



- Polipo del sigma sede di displasia di medio e alto grado, non cancerizzazione, margini indenni.
- Adenoma del cieco sede di displasia di basso grado

?

Revisione del caso

- Tosse secca da 20 anni (dal 1997) e lieve dispnea da sforzo
- Asma (dal 2001 Tp con beta2 agonista/steroide inalatorio + montelukast)
- PFR + DLCO nella norma (marzo 2007) FEV11,21 82%, TLC 4,29 11%, IT 70, DLCO 15, 90%)
- Nessun beneficio dalla terapia inalatoria e antileucotriene
- Mai eosinofilia né incremento delle IgE totali
- Prick test per inalanti negativi
- Mai wheezing né evidenza di broncospasmo all'EO
- Rx torace x 2 negative

- Visita ORL
- TC massiccio facciale: modesta sinusite mascellare sx
- Rx torace negativa

- *Test metacolina negativa (2008)*

- Terapia antireflusso
- EGDS (2002 e 2009 negative)

ASMA ?

Revisione del caso

- PFR lieve deficit ostruttivo (ottobre 2008)
- Irreversibilità al test di broncodilatazione farmacologica (FEV1 1,30 -> 1,40, 76% -> +8%)
- BPCO
- anticolinergico

- Non storia di tabagismo
- Non storia di infezioni respiratorie ricorrenti

BPCO ?

- Rx torace 2017: noduli polmonari bilaterali

?

DIPNECH

Diffuse Idiopathic Pulmonary Neuroendocrine Cells Hyperplasia

Clinical Radiology 70 (2015) 317–325

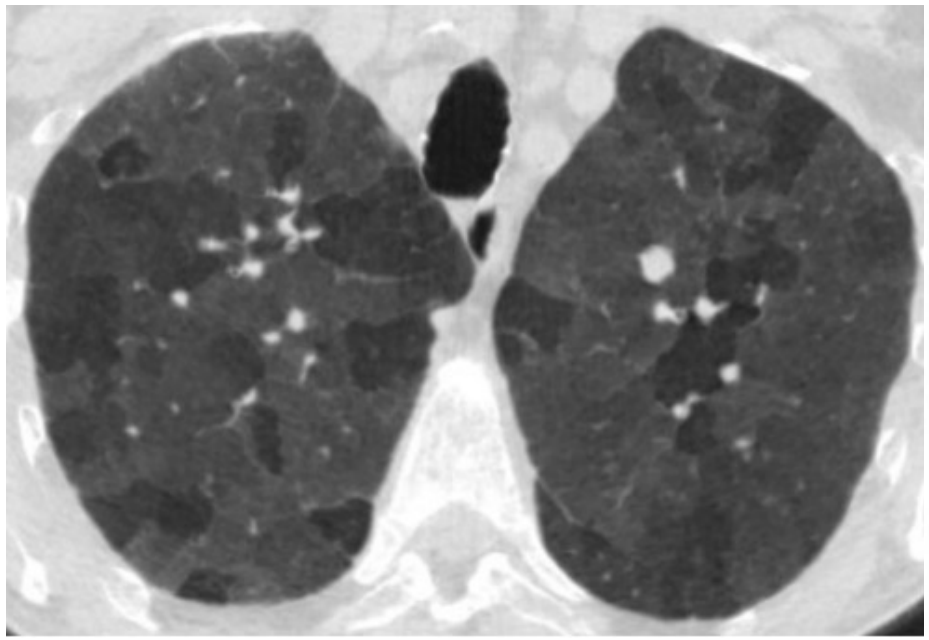
Contents lists available at ScienceDirect

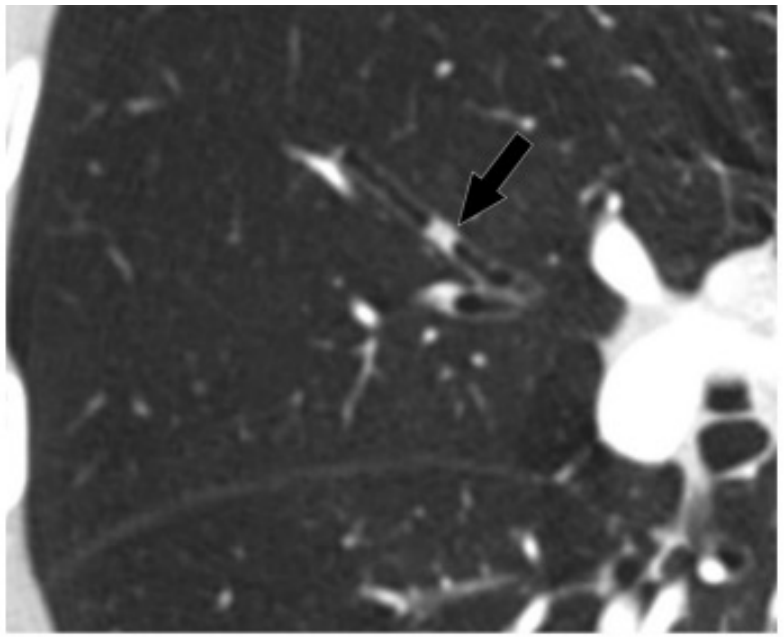
Clinical Radiology

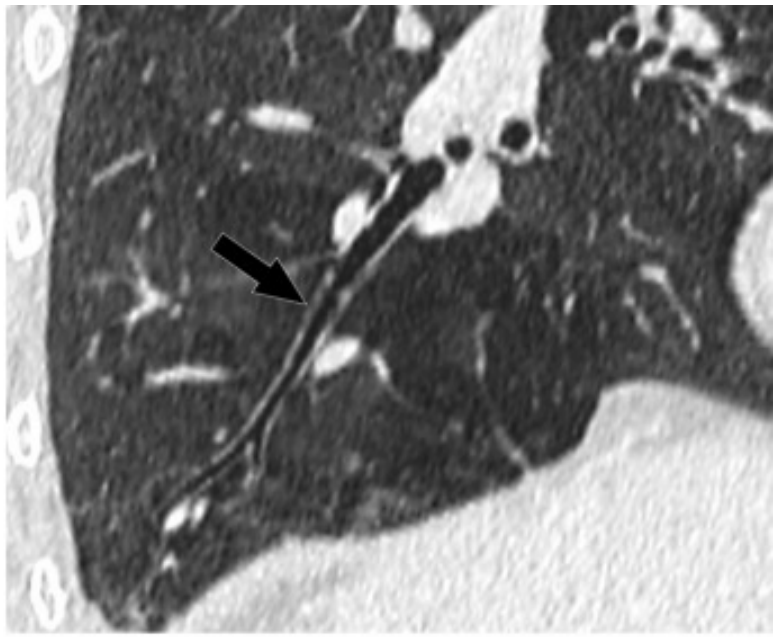
journal homepage: www.clinicalradiologyonline.net

Pictorial Review

DIPNECH: when to suggest this diagnosis on CT



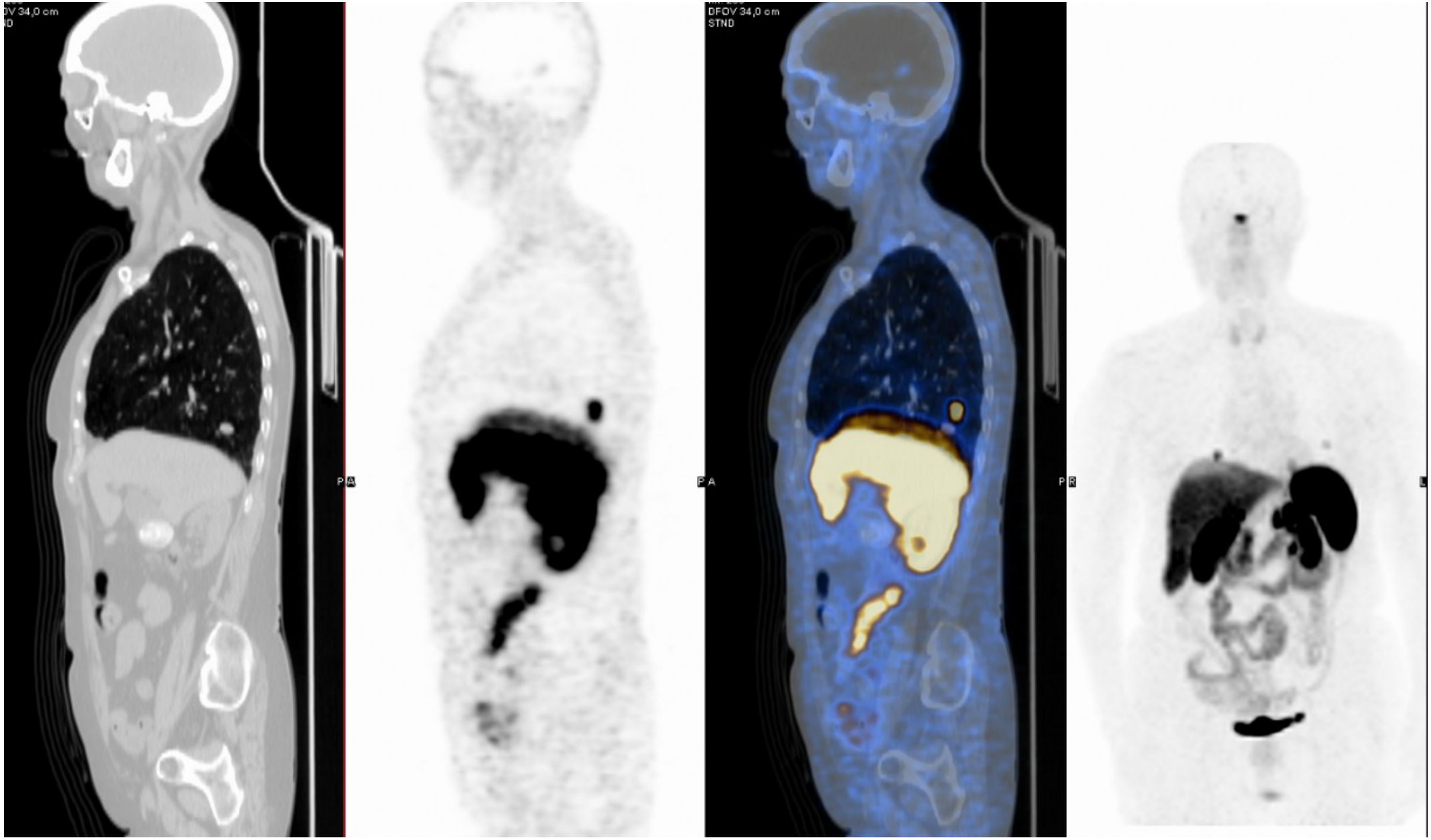


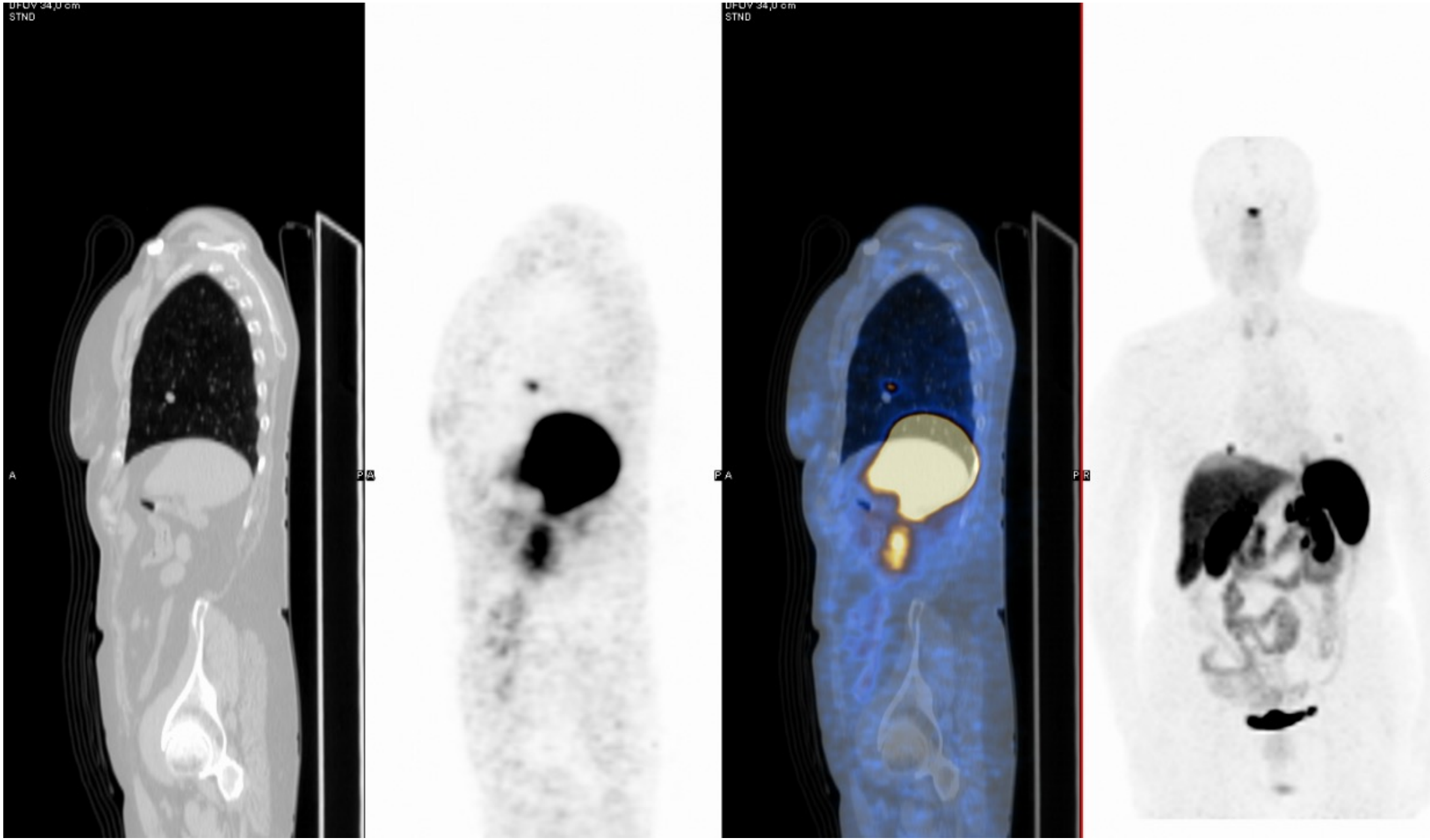


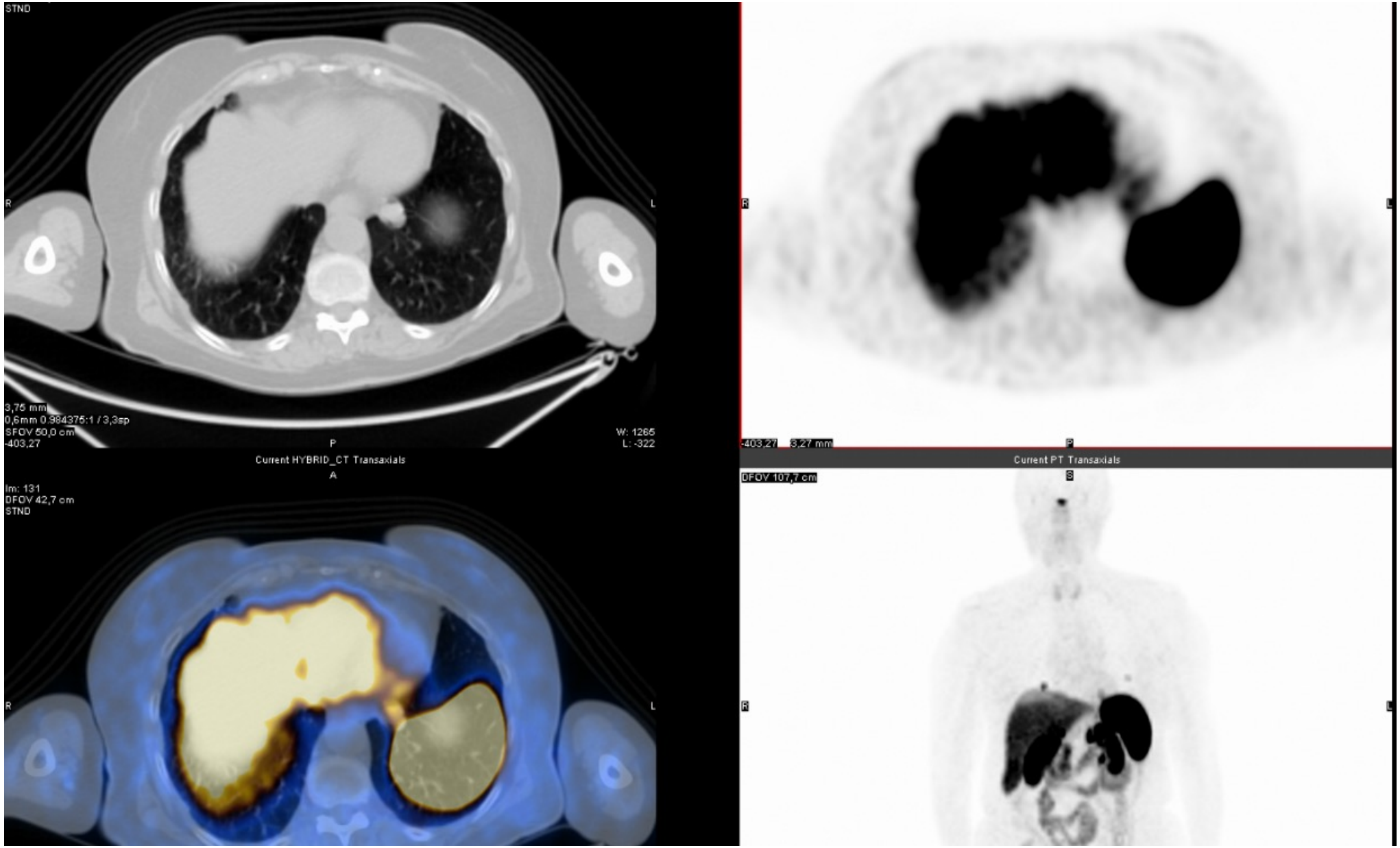
- Donne (89%)
- Età media 58 anni
- Non fumatrici
- Sintomi 45-55%
    - tosse non produttiva 71%
    - dispnea 63%
    - wheezing 25%
- PFR deficit da moderato a severo 44%
    - sindrome ostruttiva non reversibile 54-78%
    - sindrome restrittiva 13%
    - sindrome mista 17%
    - nella norma 17%

?

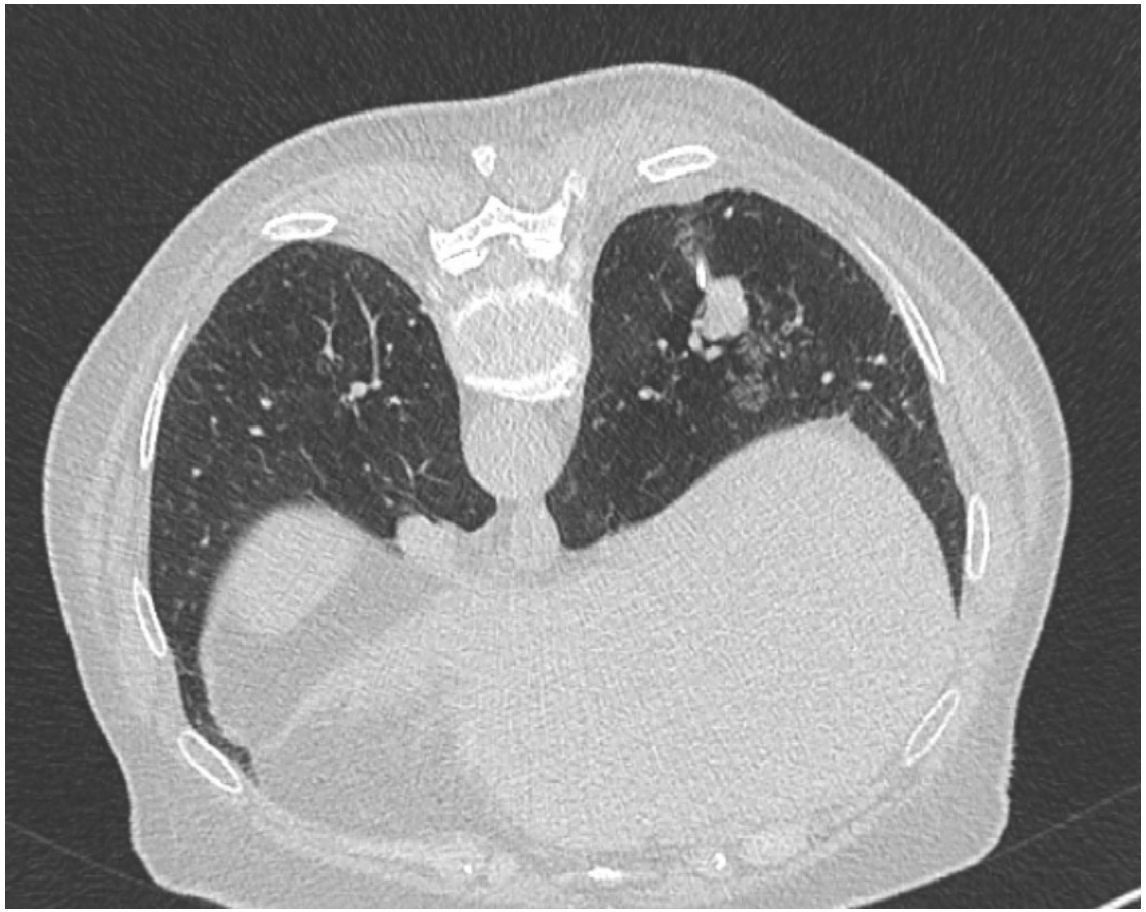
PET TB con GA68

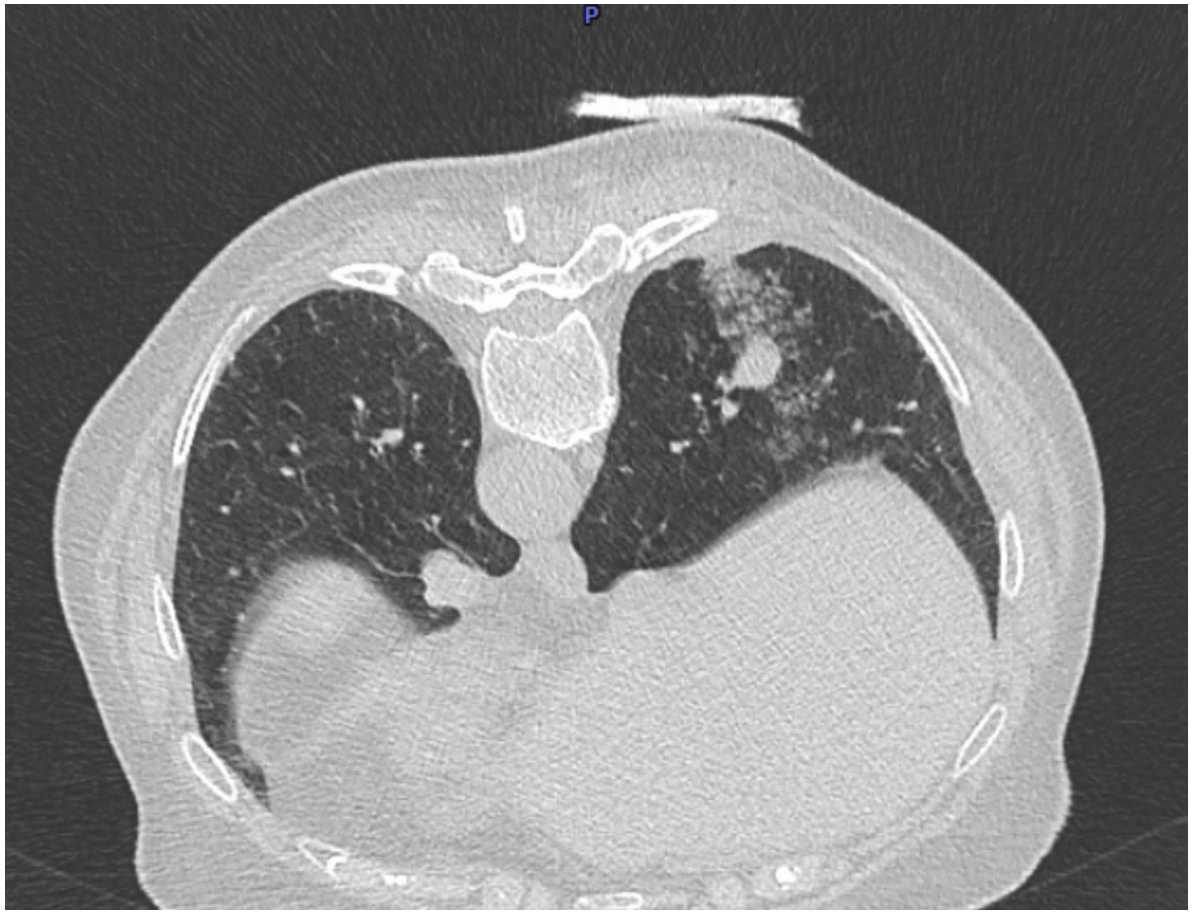


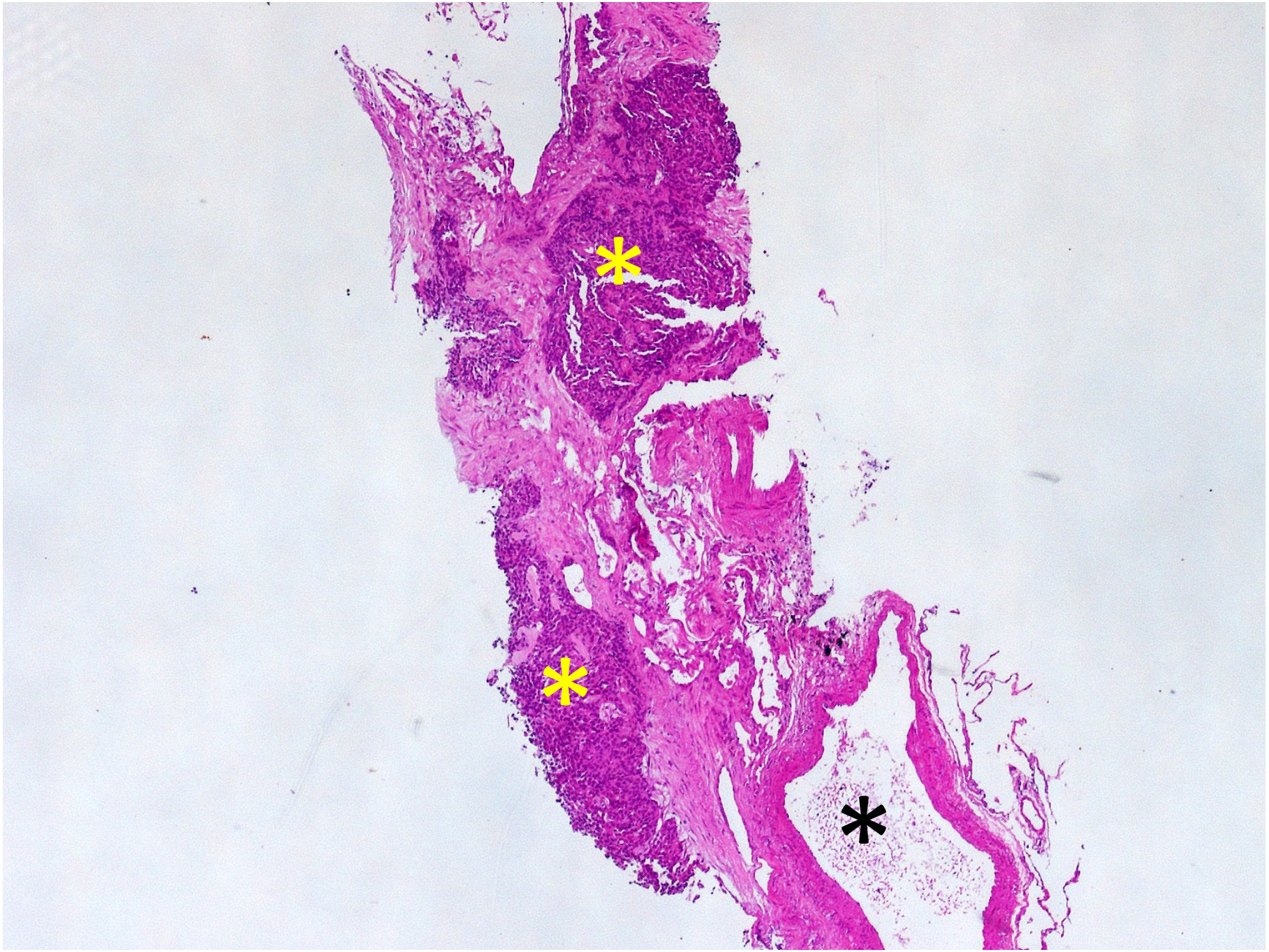

DFOV 34,0 cm
STND
A
P A
DFOV 34,0 cm
STND
P A
P R

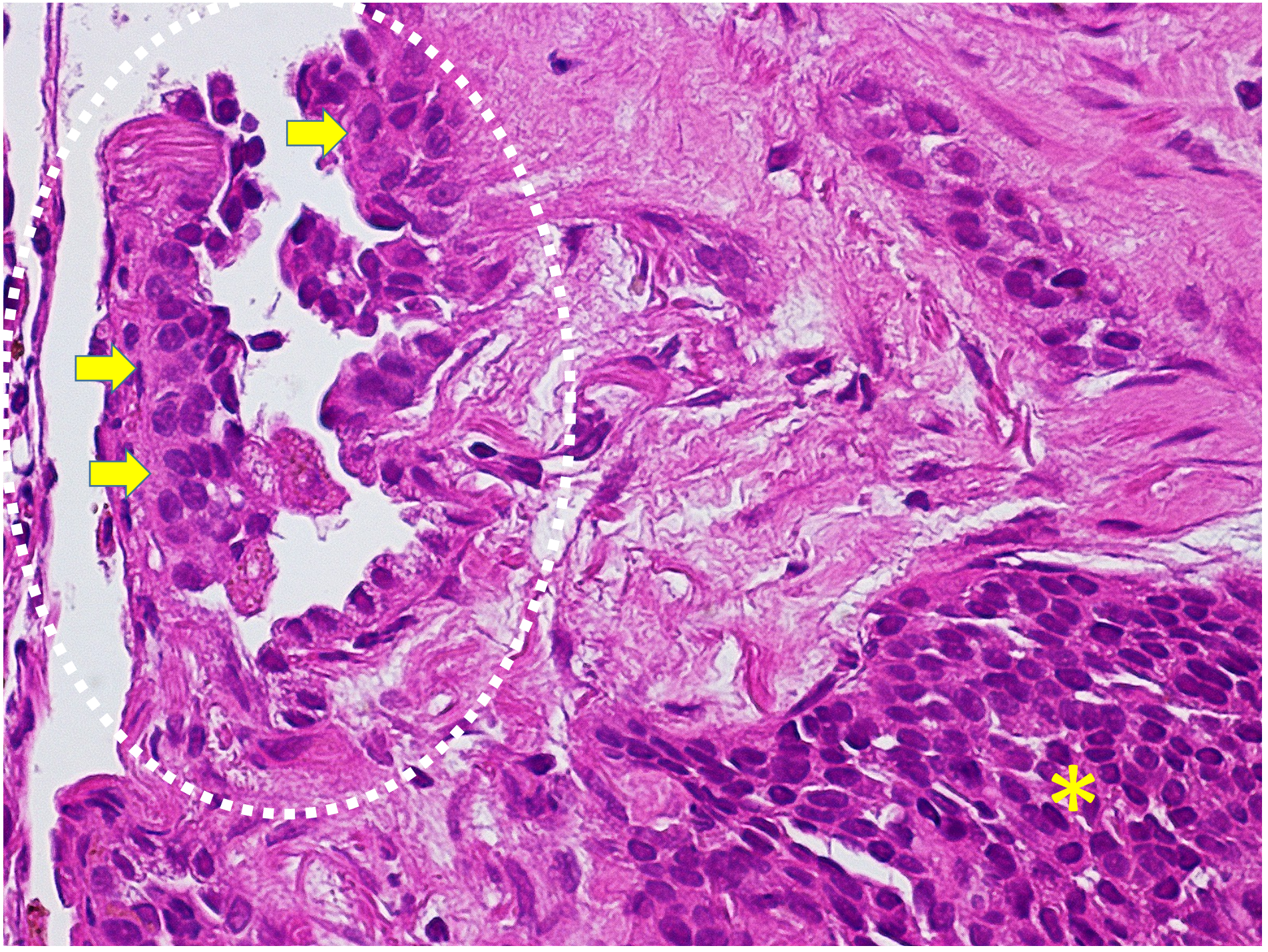

STND
R
L
3,75 mm
0,6mm 0.984375:1 / 3,3sp
SFOV 50,0 cm
-403,27
P
W: 1265
L: -322
Current HYBRID_CT Transaxials
A
Im: 131
DFOV 42,7 cm
STND
R
L
-403.27
3.27 mm
P
Current PT Transaxials
DFOV 107,7 cm
S
R
L

Agobiopsia Tc guidata

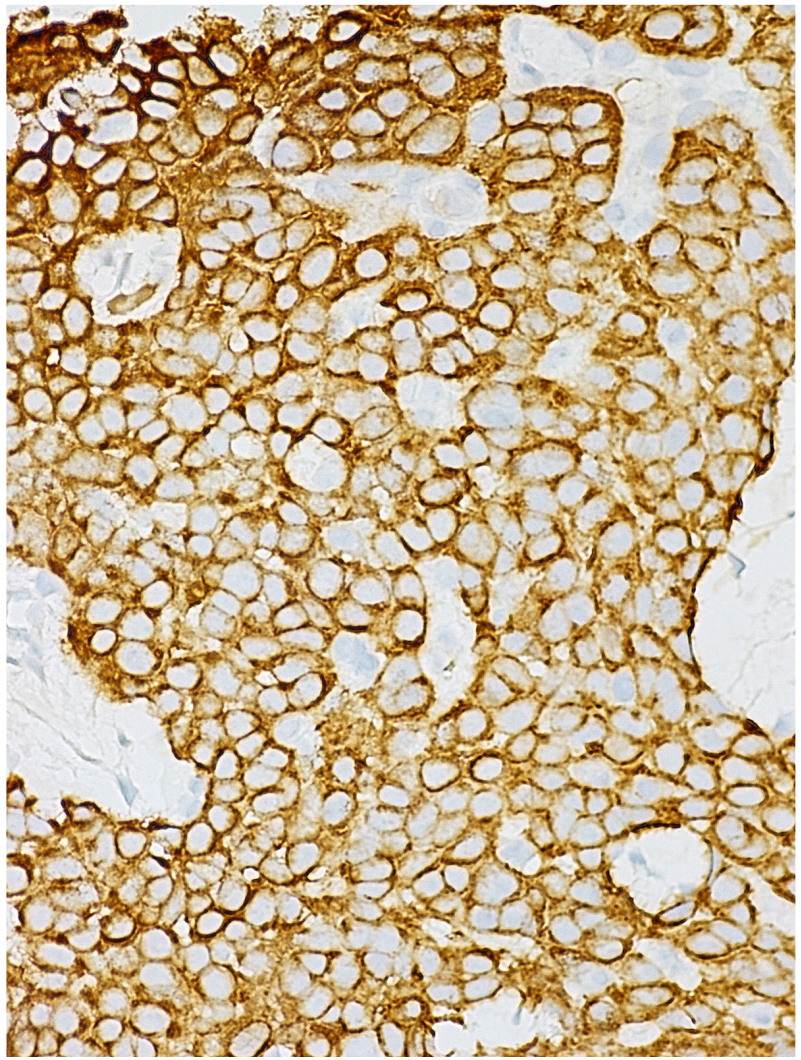




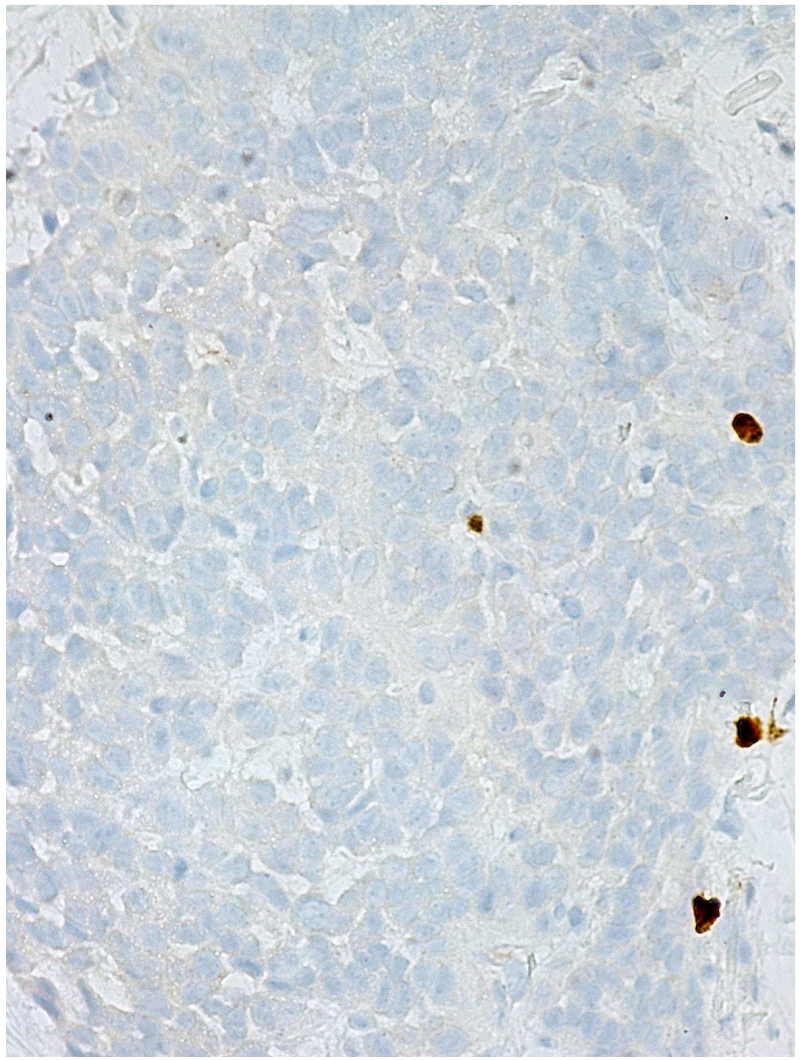




Cromogranina A



Ki-67



Agauyo SM, N Engl J Med, 1992

WHO, 1999

2021 WHO criteria for the diagnosis of pulmonary neuroendocrine tumors

Tumor type	Criteria
Diffuse idiopathic neuroendocrine cell hyperplasia	Multifocal hyperplasia of neuroendocrine cells in bronchiolar epithelium, associated with multiple carcinoid tumorlets (generally less than 5 mm in greatest dimension), with or without obliterative bronchiolitis; and with or without a carcinoid tumor
Typical carcinoid	Carcinoid morphology and <2 mitoses/2 mm^2 (10 HPFs), lacking necrosis and >0.5 cm
Atypical carcinoid	Carcinoid morphology with 2 to 10 mitoses/2 mm^2 (10 HPFs) or necrosis (often punctuate)
Large cell neuroendocrine carcinoma	Neuroendocrine morphology (organoid nesting palisading rosettes, trabeculae);
	High mitotic rate >10/2 mm^2 (10 HPFs), median of 70/2 mm^2;
	Necrosis (often large zones);
	Cytologic features of a NSCLC: large cell size, low nuclear to cytoplasmic ratio, vesicular or fine chromatin, and/or frequent nucleoli; some tumors have fine nuclear chromatin and lack nucleoli but qualify as NSCLC because of large cell size and abundant cytoplasm; and
	Positive immunohistochemical staining for one or more NE markers (other than neuron-specific enolase) and/or NE granules by electron microscopy
Small cell neuroendocrine carcinoma	Small size (generally less than the diameter of three resting lymphocytes);
	Scant cytoplasm;
	Nuclei: finely granular nuclear chromatin, absent or faint nucleoli;

iperplasia diffusa idiopatica a cellule neuroendocrine (DIPNECH)

Terapia e prognosi

- Follow up
- Steroidi orali e inalatori
- Analoghi della somatostatina

  36% miglioramento lieve

  14% miglioramento moderato

  26% miglioramento significativo
- Resezione chirurgica polmonare
- trapianto

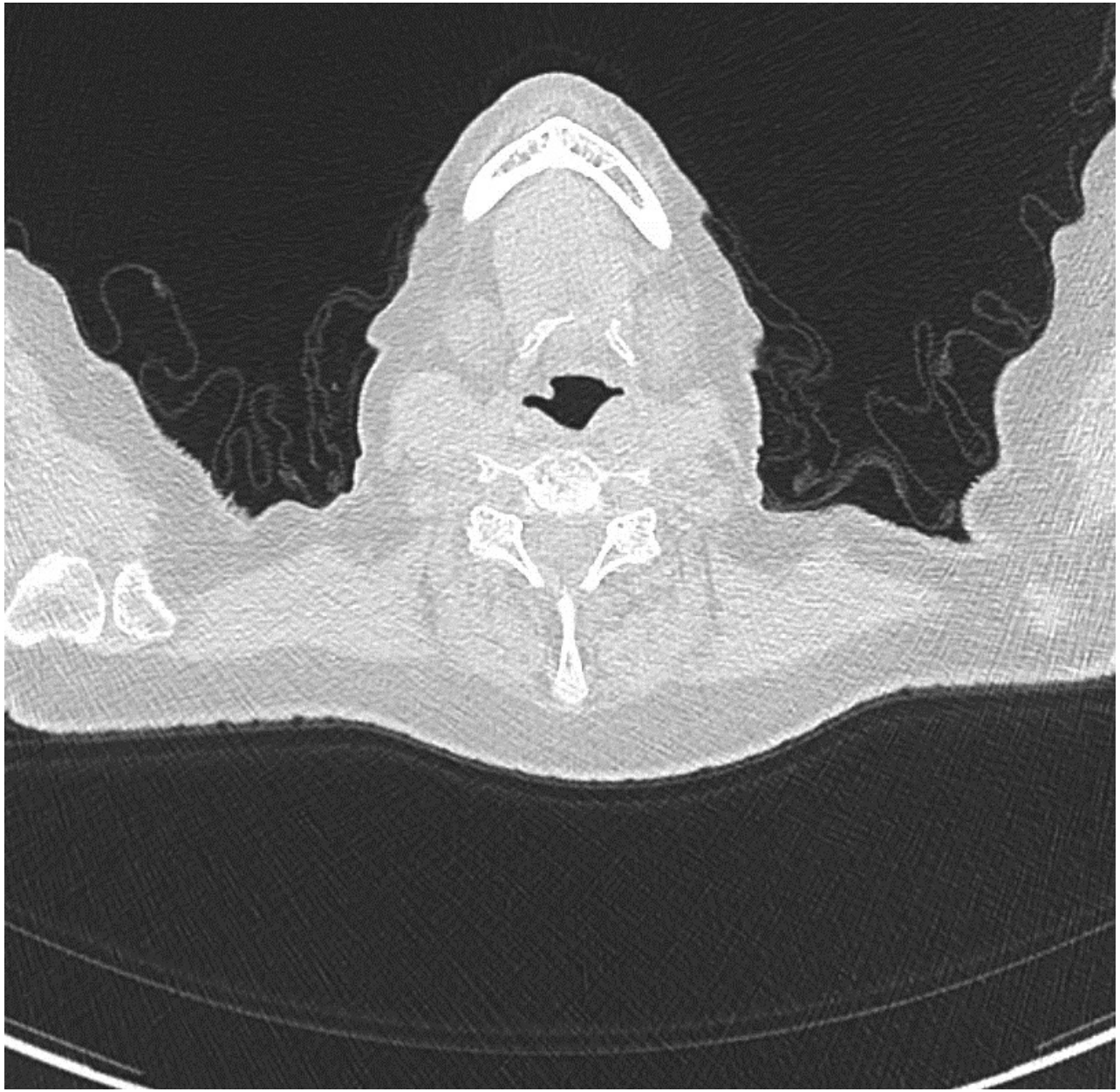
Follow up

- EE del 6.3.19: cromogramina A 104 (vn <84.7), NSE 9.7 (vn < 18.3)-
- EE del 16/01/2020: cromogranina A 124.3, NSE 8.7

- Longastatina 20 mg 1 fl im ogni 28 gg

- PFR (22.7.21): FEV1 0.93 L, 73% FVC 1.56 L, 96% FEv1/FVC 60%
- EE del 22/07/2021: cromogranina A 2.90 nmol/L, NSE 10.40 mcg/L

CT Imaging



Wheezing illnesses other than asthma in adults

Extrathoracic upper airway causes of wheeze

Anaphylaxis
Vocal cord edema or paralysis
Paradoxical vocal cord motion
Laryngeal stenosis
Laryngocele
Tonsillar hypertrophy
Goiter
Postnasal drip syndrome

Intrathoracic central airway causes of wheeze

Tracheal stenosis

Tracheal and bronchial tumors

Respiratory papillomatosis

Tracheomalacia, tracheobronchomalacia, and hyperdynamic airway collapse

Relapsing polychondritis

Tracheobronchial amyloid

Mucus plugs

Vascular rings and aneurysms

Mediastinal mass

Herpes simplex virus (HSV-1) tracheobronchitis

Intrathoracic lower airway causes of wheeze

Bronchiectasis due to recurrent infections or parenchymal fibrosis with traction

Bronchiolitis

Bronchiolitis obliterans

Cardiac asthma

Carcinoid tumors

Diffuse idiopathic pulmonary neuroendocrine cell hyperplasia (DIPNECH)

Occupational causes of nonasthmatic wheeze

Parasitic infection

Reactive airways disease syndrome

Airway distortion

Focal wheeze


Grazie !