

Airways Disease

Dr Jon Banks *MBBS B.Pharm Clin Dip Pall Med
JP(Qual)*

Respiratory and Sleep and General and Acute
Medicine Advanced Trainee

Logan Hospital

53M – smoker with SOBOE

Respiratory Function Report - Spirometry, DLCO, FeNO

Visit date 16.07.21

Physician:		Referred:	Inpt- ED	Scientist:	
SES Module:	Box	Age:	53 Years	Smoking History:	Ex-Smoker
Height:	173 cm	Weight:	72.8 kg	BMI:	24 kg/m ²
Race:	Caucasian	Medication:	Nil Resp	Bronchodilator:	Pre- BD Only

		Ref	Pred LL	Pred UL	Pre	%Ref
Spirometry - Quanjer GLI 2012-						
FEV 1	L	3.60	2.78	4.38	<u>1.96</u>	54
FVC	L	4.57	3.54	5.61	<u>3.27</u>	72
FEV 1 % FVC	%	79	68	89	<u>60</u>	76
MFEF 75/25	L/s	3.24	1.70	5.26	<u>0.79</u>	24
PEF	L/s	9.25	7.06	11.45	<u>5.54</u>	60
FEV 0.5 / FIV 0.5					0.95	
IC	L	3.57	2.53	4.57	<u>2.14</u>	60
VC EX	L	4.97	3.97	6.00	<u>3.31</u>	67

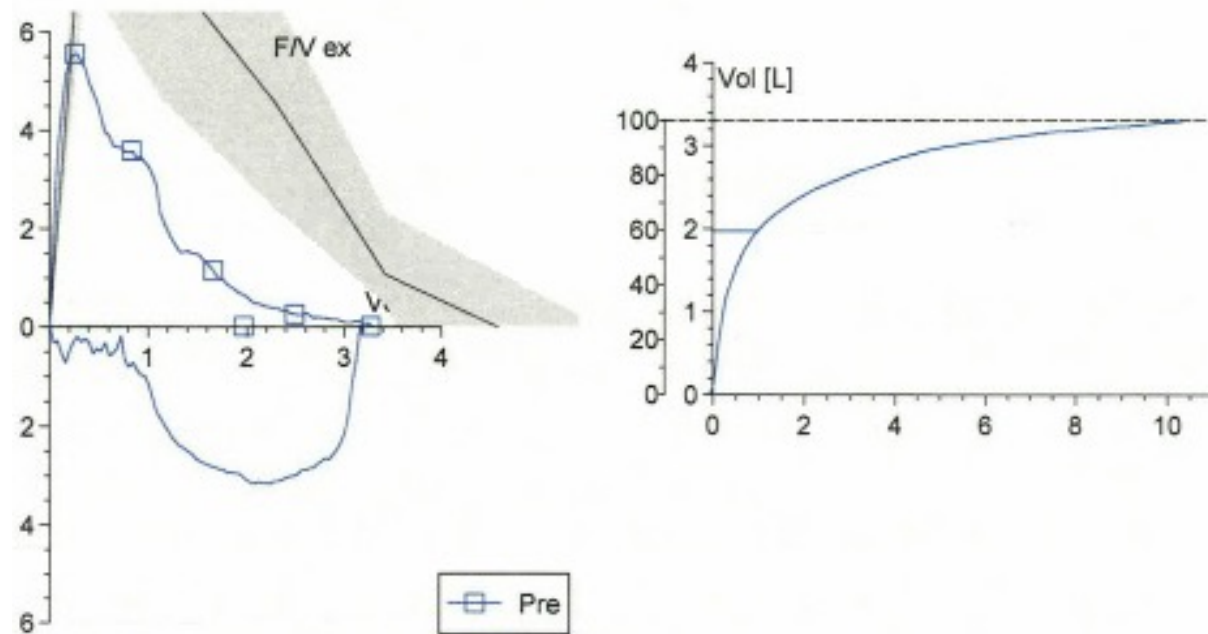


FeNO (ppb)

Diffusing Capacity -Stanojevic GLI 2020-

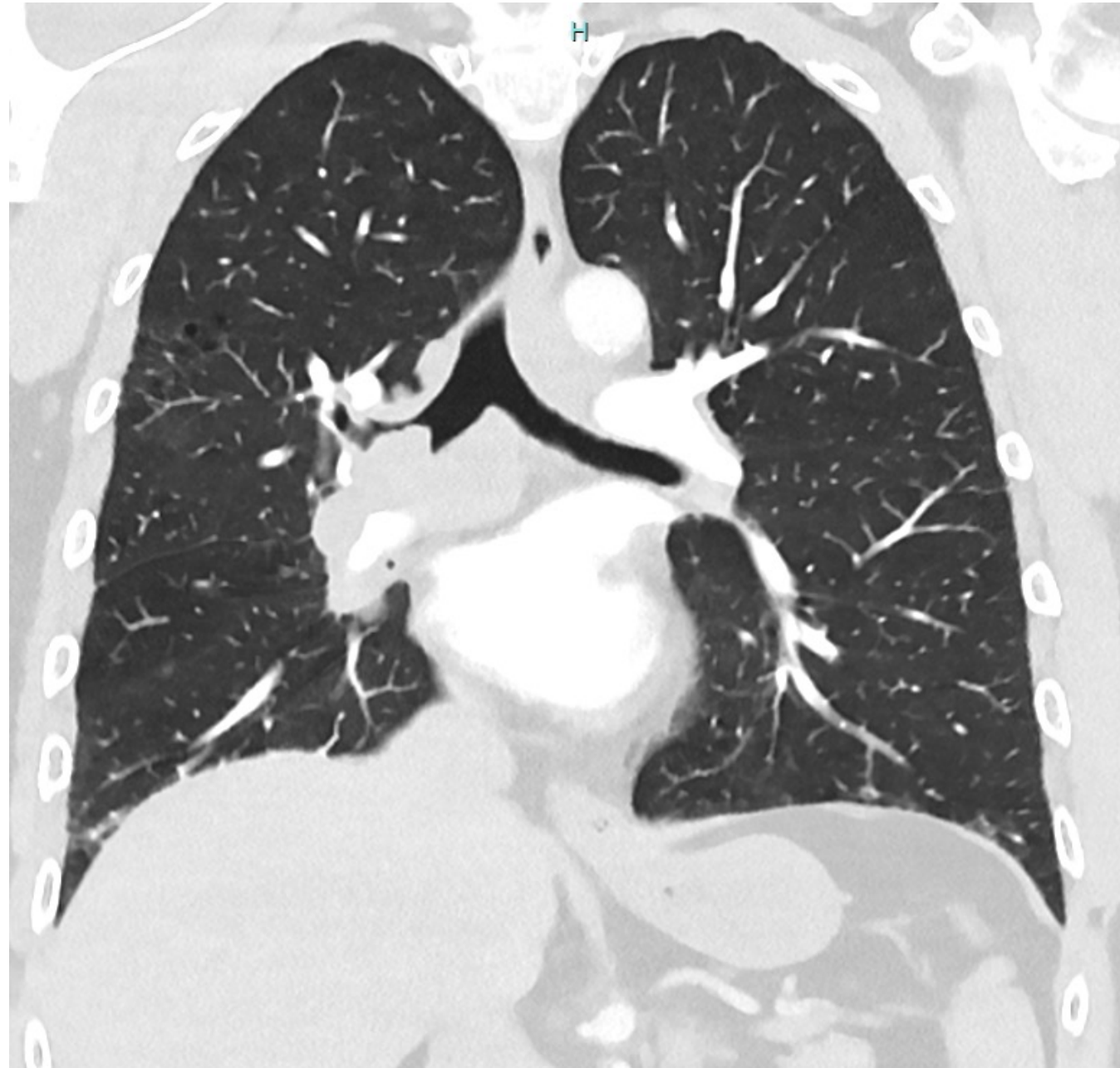
DLCO_SB	ml/(min*mmHg)	27.2	20.7	34.9	<u>18.1</u>	67
DLCOcSB	ml/(min*mmHg)	27.2	20.7	34.9	<u>18.1</u>	66
KCOc_SB	ml/(min*mmHg*L)	4.4	3.4	5.6	4.1	91
VA_SB	L	6.18	5.01	7.43	<u>4.46</u>	72
IVC	L	4.97	3.97	6.00	<u>3.18</u>	64
Hb	g(Hb)/dL				14.70	

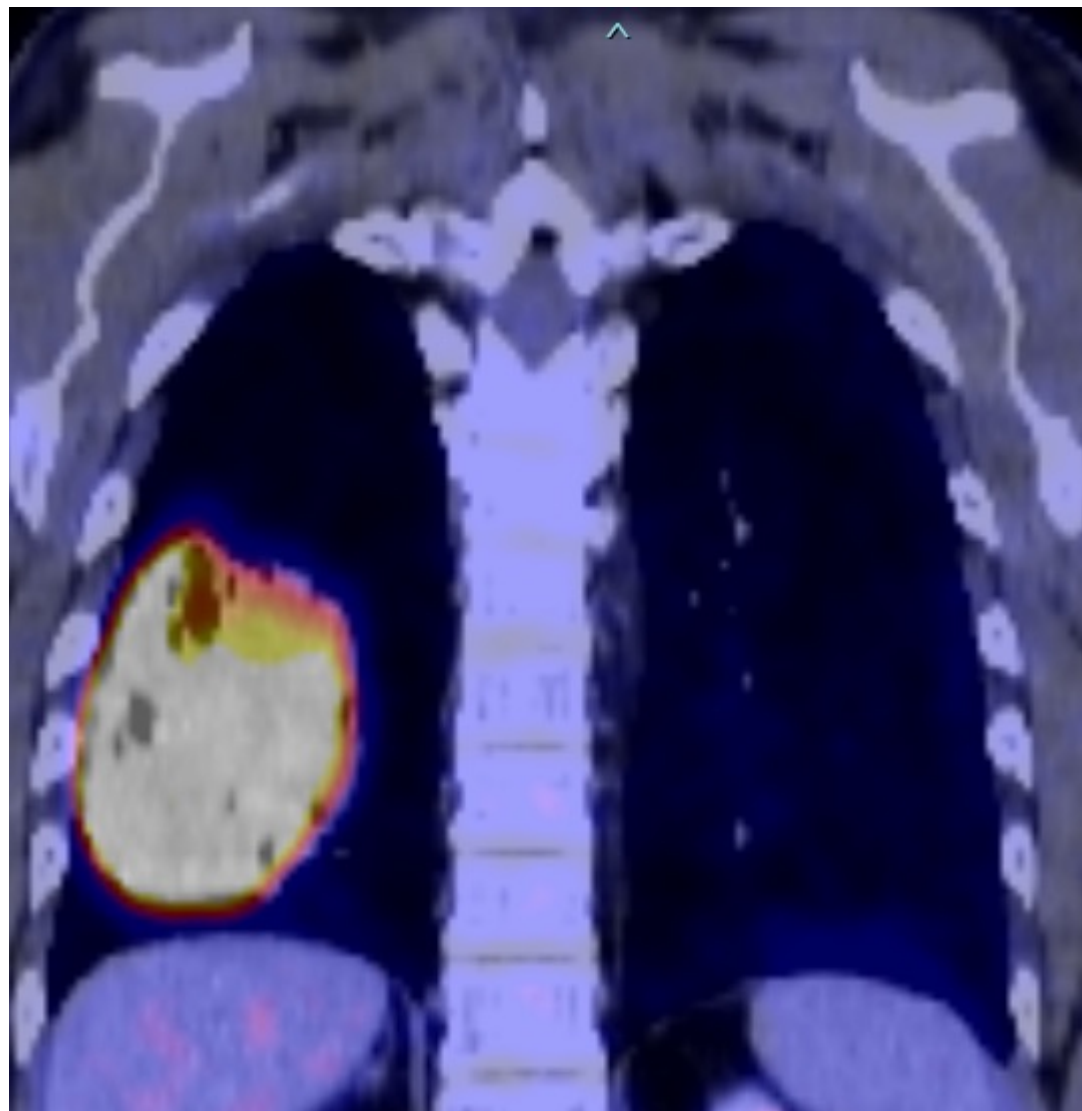
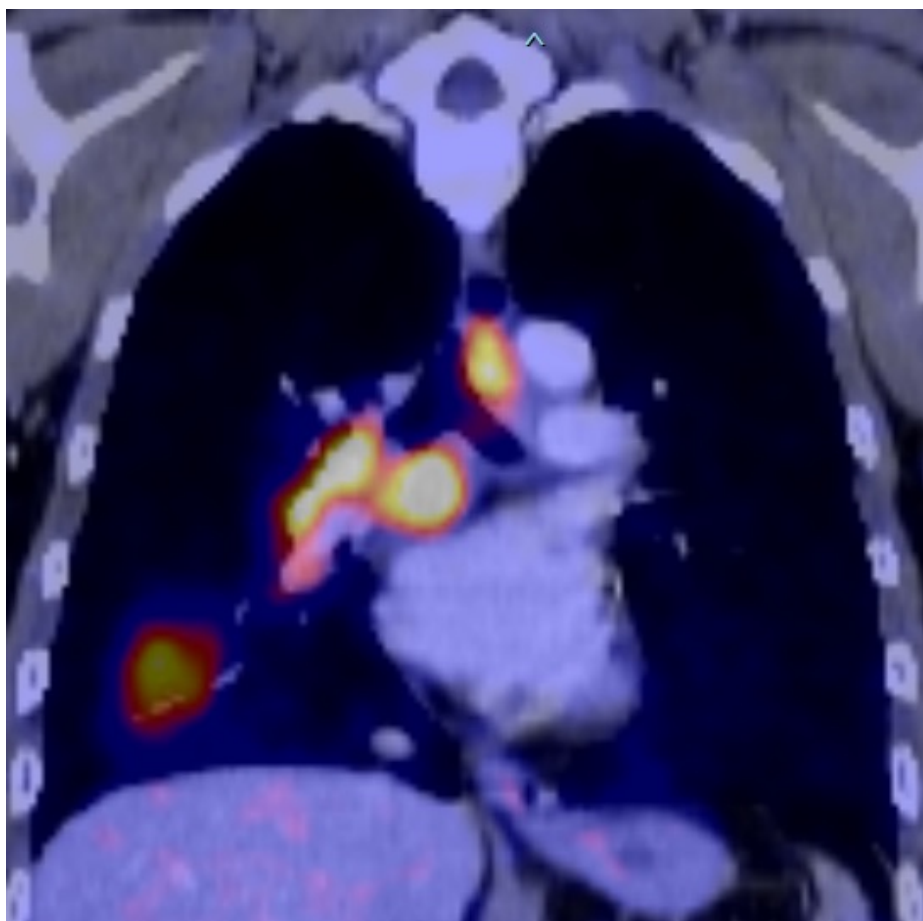




Scientist Comments:

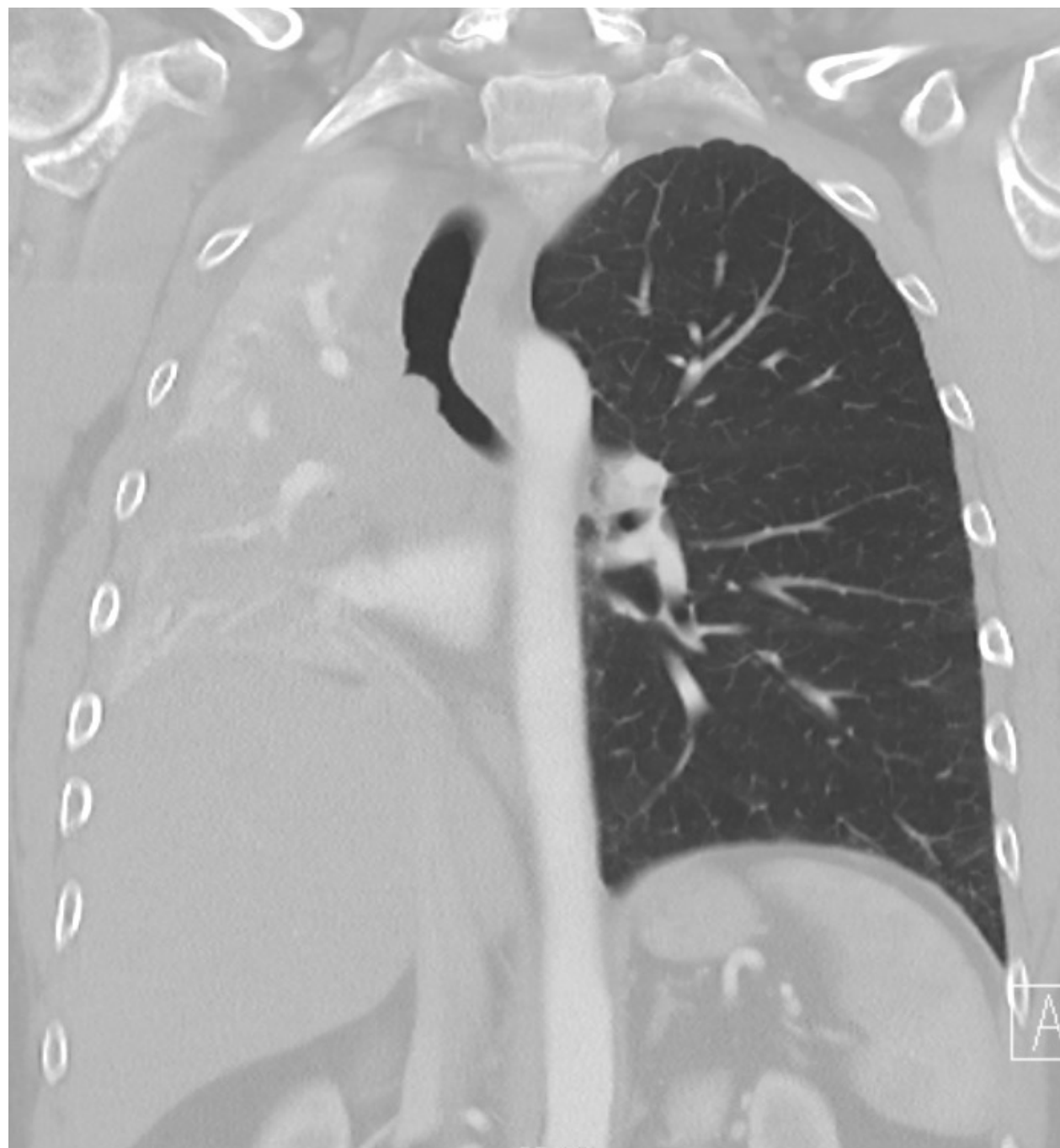
Hx recent small vol haemoptysis (reason for admission), monitored throughout test - no haemoptysis during test. Note: inspiratory loop is maximal and repeatable. Technically acceptable and repeatable test.





SUPPLEMENTARY REPORT

The cell block contains groups of malignant epithelial cells exhibiting some cytoplasmic clearing. The cells show variable staining with pancytokeratins AE1/AE3 and MNF116 as well as TTF-1. They are negative for PAX8. Also noted within the cell block is cytologically malignant cartilage consistent with a component of heterologous chondrosarcomatous differentiation. The combination of findings is consistent with a pulmonary carcinosarcoma. Testing for therapeutic targets will be performed.



57F referred with progressive SOB

ID:	8003601118394662				
Name:					
Age:	57 years 9 months	DOB:	27/10/1962	Exam Date:	14/08/2020 10:54
Height:	169 cm	Weight:	85.3 kg	BMI:	29.9
Gender:	Female	Ethnic Origin:	Caucasian	Factor:	100
Smoking:	Non Smoker	Dyspnoea:	0		
Medication:					

Please Note: Spirometry data and graphs are either best individual values or composite curve

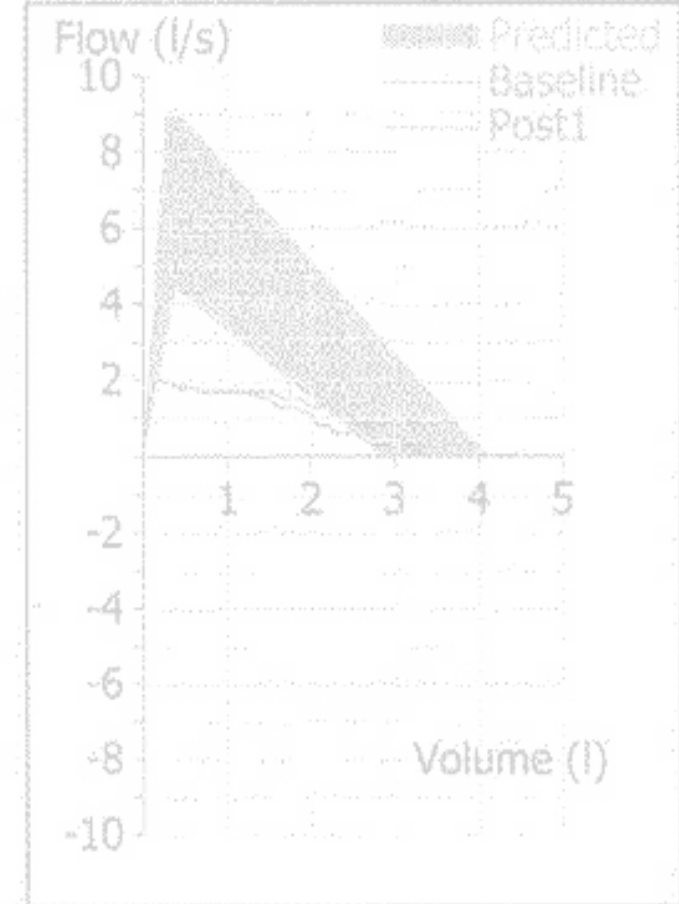
Summary of All forced tests

	FEV1	FVC	PEF	FEV1/FVC	Quality	VAR	Time	Date
Base	1.67	2.90	111	58%	Good Blow	-11%	10:56 A	14/08/2020
Base	1.66	3.21	111	52%	Good Blow	-5%	10:56 A	14/08/2020
Base	1.67	3.40	114	49%	Good Blow	-1%	10:57 A	14/08/2020
Base	1.71	3.31	118	52%	Good Blow	-2%	11:00 A	14/08/2020
Base+	1.71	3.40	118	50%	-	-		
ATSERS Criteria (2005): 15% to 16%								
Post1	1.75	3.68	121	48%	Good Blow	-1%	11:16 A	14/08/2020
Post1	1.76	3.74	119	47%	Good Blow	0%	11:18 A	14/08/2020
Post1	1.74	3.69	119	47%	Good Blow	-1%	11:19 A	14/08/2020
Post1+	1.76	3.74	121	47%	-	-		

Selected indices of the best blows

Index	Base	%Pred	Zscr	Post1	%Pred	%Chg	Zscr	[Min	Pred	Max]	SD
FEV1	(1.71 l)	62%	-3.11	(1.76 l)	64%	3%	-2.96	2.20 l	2.78 l	3.32 l	0.34
FVC	3.40 l	97%	-0.24	3.74 l	107%	10%	0.66	2.86 l	3.49 l	4.12 l	0.38
FEV1/FVC	(50%)	85%	-5.55	(47%)	61%	-6%	-6.22	69%	77%	85%	4.83
PEF	(118 l/min)	29%	-3.52	(121 l/min)	29%	3%	-3.58	277 l/min	411 l/min	545 l/min	81.00
Lung Age	87 years										

Best Flow Volume Graph



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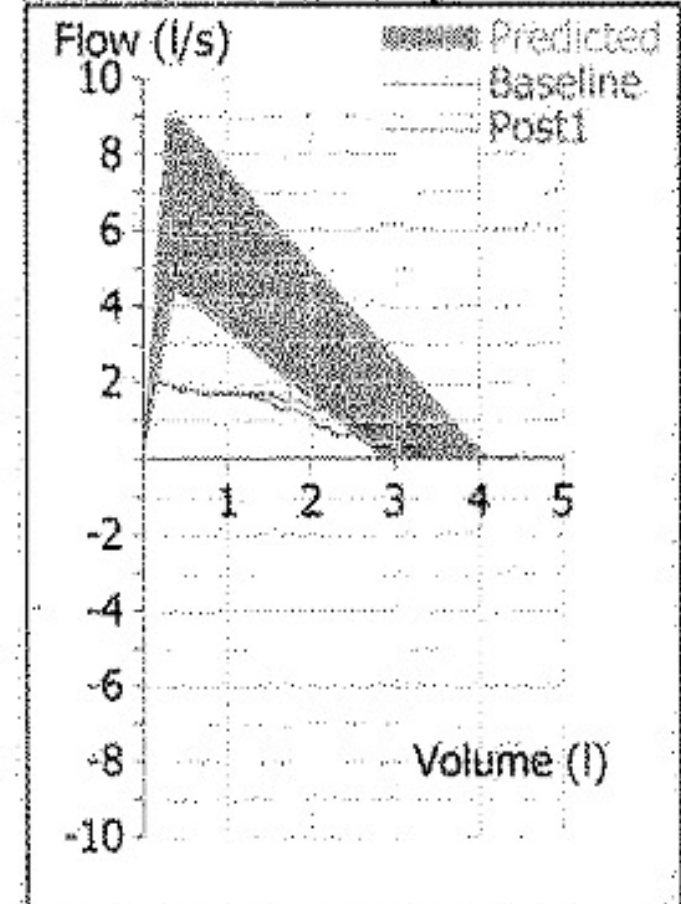
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Lung Age	87 years										

Best Flow Volume Graph



Dear Iain,

Thank you for seeing Mrs [redacted] aged 57 yrs , with worsening Shortness of breath .

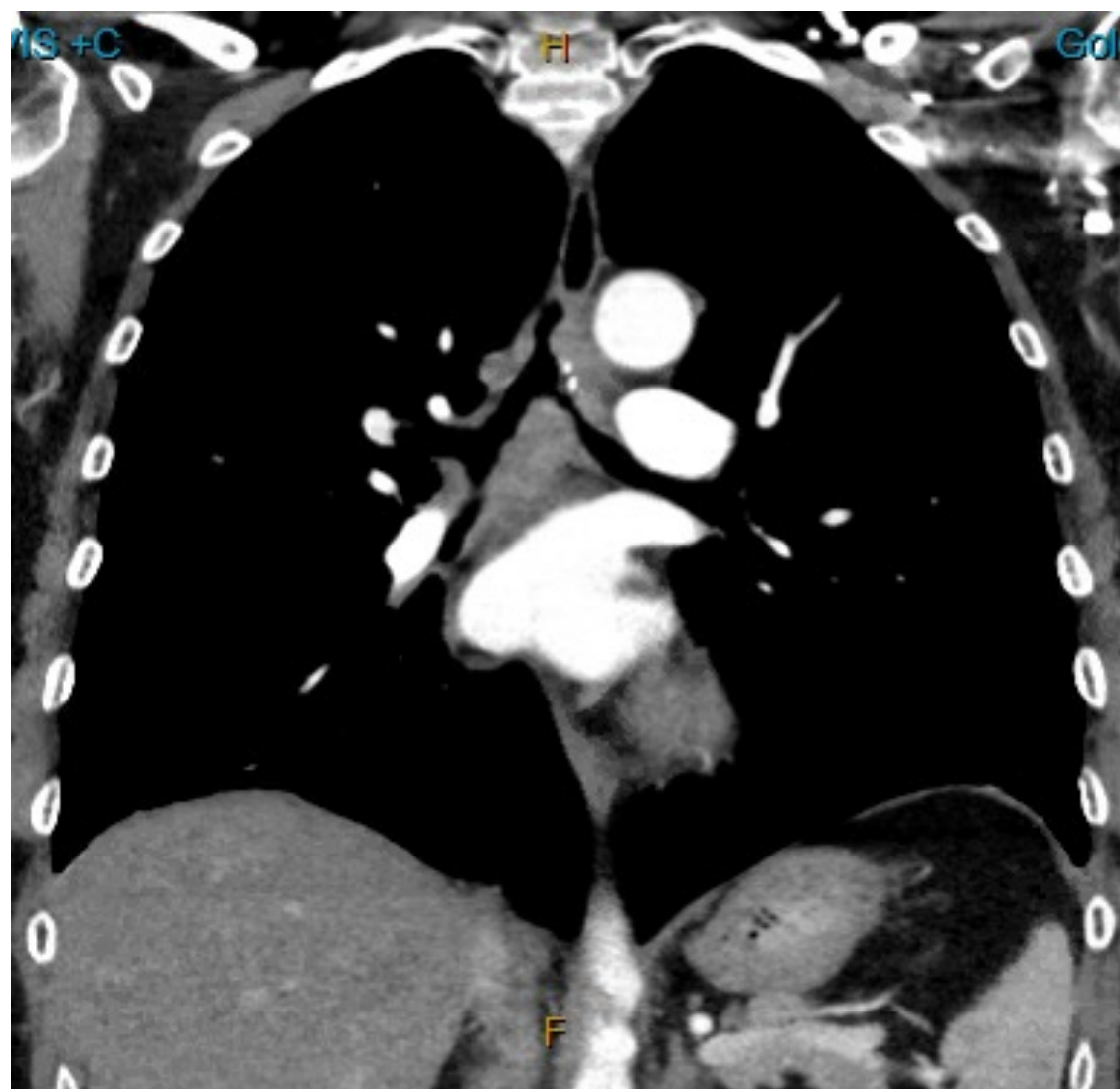
She is travelling at the moment with her husband [redacted] , one of your patients .

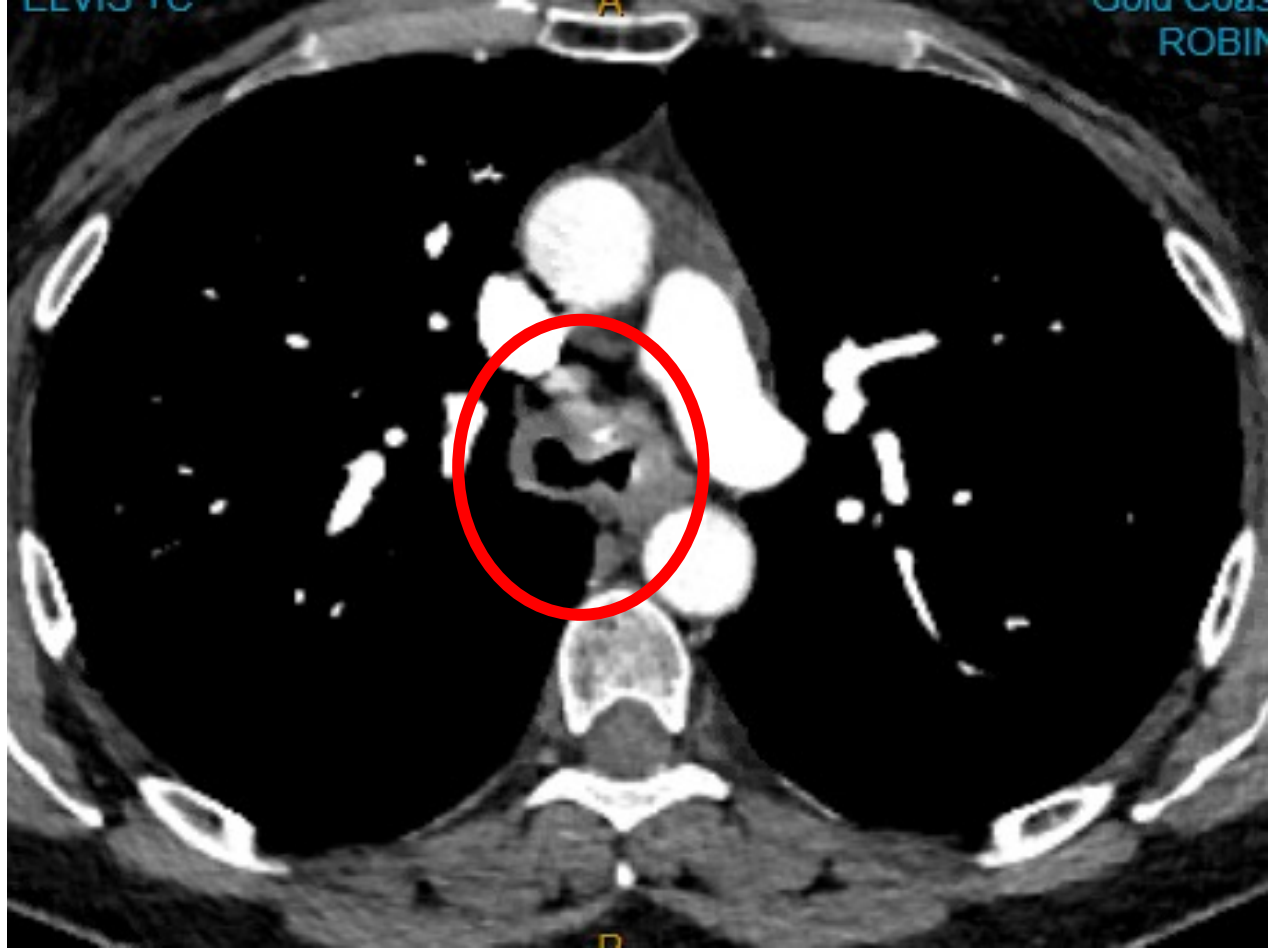
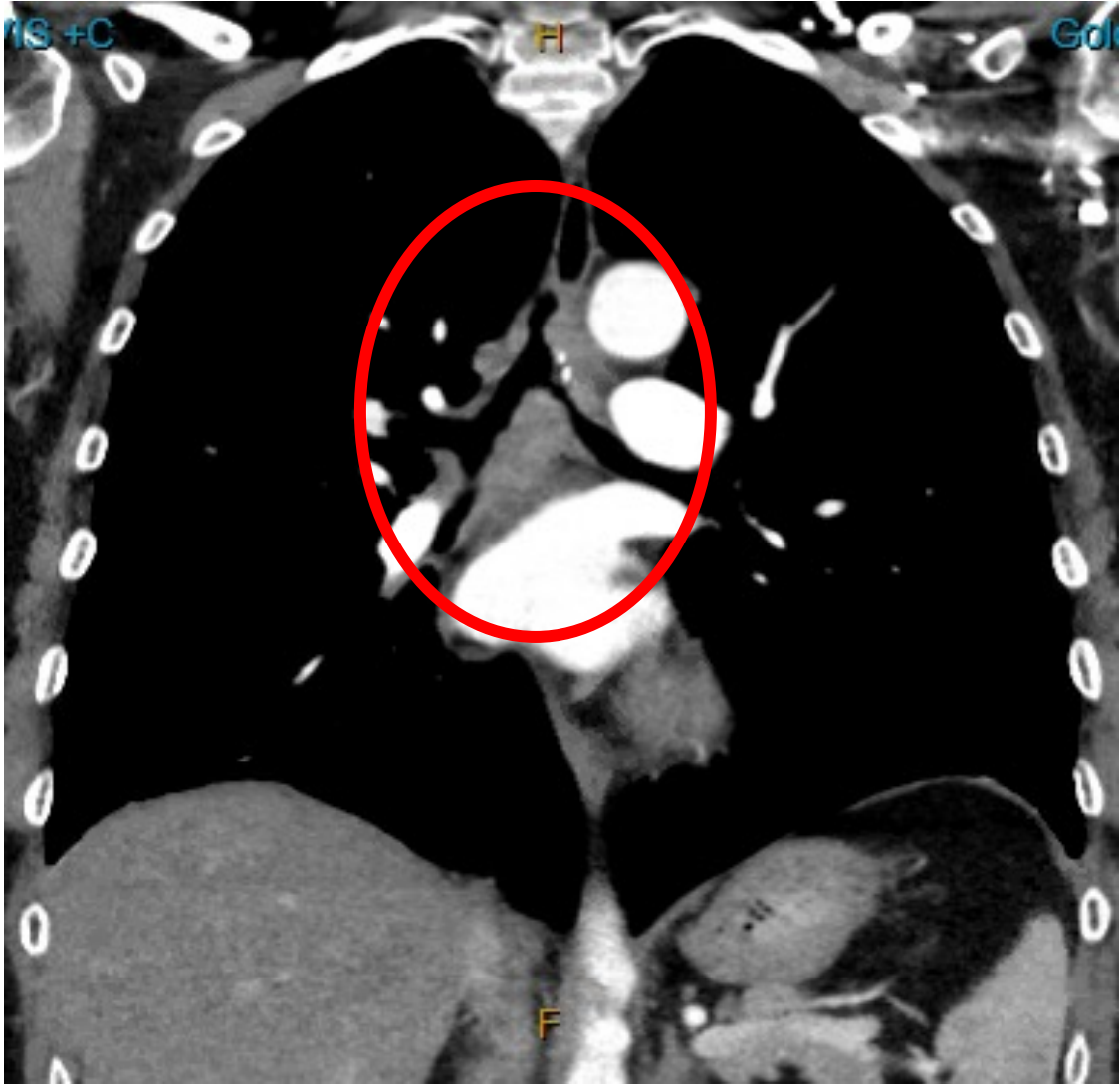
Her SOB only started in March and when she talks you can hear her gasp for air.

We organised a CT chest and pre/post spirometry after -ve COVID testing .

The Radiologist suspects **tracheobronchopathia osteochondroplastica**.

The pre/post spirometry shows a severe impact.
FEV1/FVC 65% , FVC normal , FEV1 62%.
No reversibility of 12% or more .





Add'l Images:



Tracheobronchial Tree



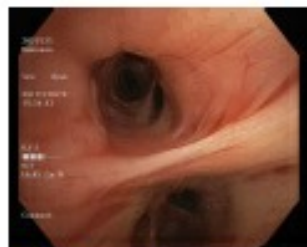
5 Left mainstem bronchus ; NBI distal left main bronchus



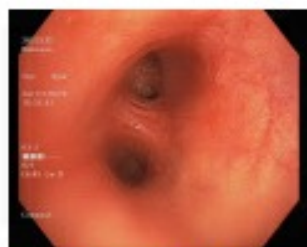
9 Trachea post cryobiosy of small nodule



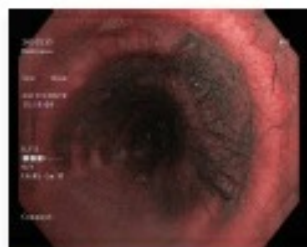
13 Trachea ; trachea pre-biopsy



1 Right mainstem bronchus



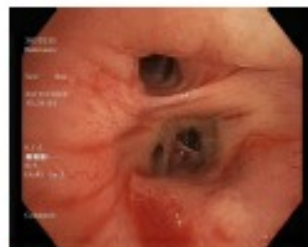
6 Left mainstem bronchus ; distal LMB



10 Subglottic tracheal wall ; NBI proximal trachea



14 Trachea ; distal trachea pre-intervention



2 Bronchus intermedius with endobronchial disease extending into the RMB



7 Right mainstem bronchus ; RMB - RUL at 2 o'clock



11 Trachea ; main carina



16 Trachea ; exophytic, pedunculated nodule snared and retrieved



4 Trachea ; Post cryobiosy and snare biopsy



8 Right mainstem bronchus ; RMB



12 Trachea ; trachea pre-biopsy



13 Trachea ; trachea pre-biopsy



16 Trachea ; exophytic, pedunculated nodule snared and retrieved

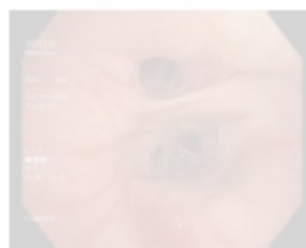
Add'l Images:



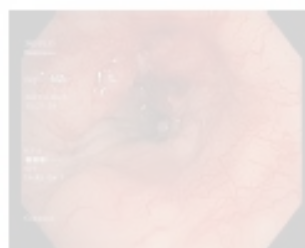
Tracheobronchial Tree



1 Right mainstem bronchus



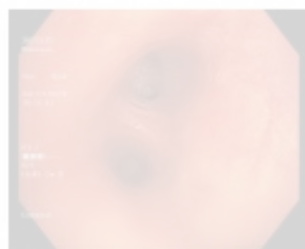
2 Bronchus intermedius with endobronchial disease extending into the RMB



4 Trachea ; Post cryobiospy and snare biospy



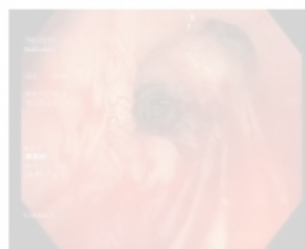
5 Left mainstem bronchus ; NBI distal left main bronchus



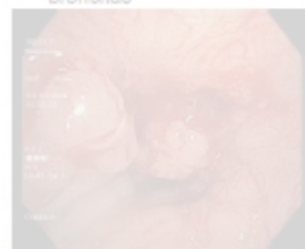
6 Left mainstem bronchus ; distal LMB



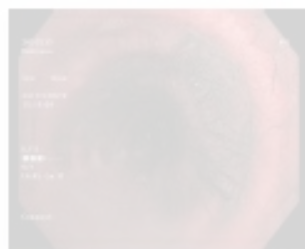
7 Right mainstem bronchus ; RMB - RUL at 2 o'clock



8 Right mainstem bronchus ; RMB



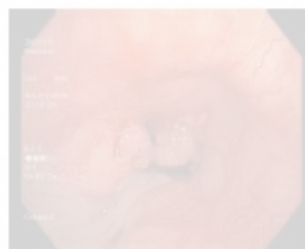
9 Trachea post cryobiospy of small nodule



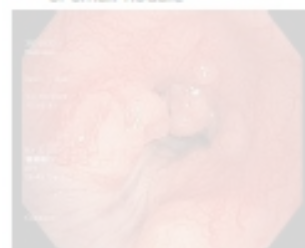
10 Subglottic tracheal wall ; NBI proximal trachea



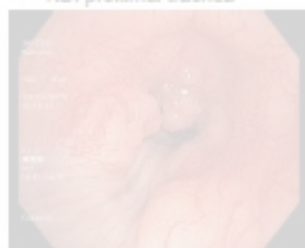
11 Trachea ; main carina



12 Trachea ; trachea pre-biospy



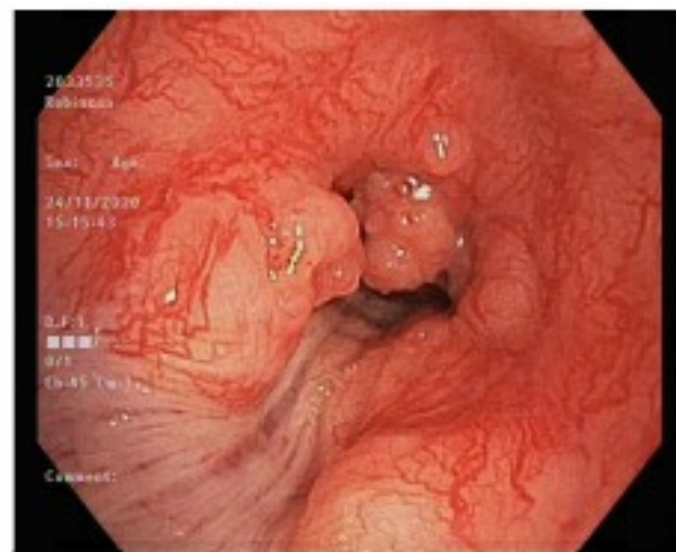
13 Trachea ; trachea pre-biospy



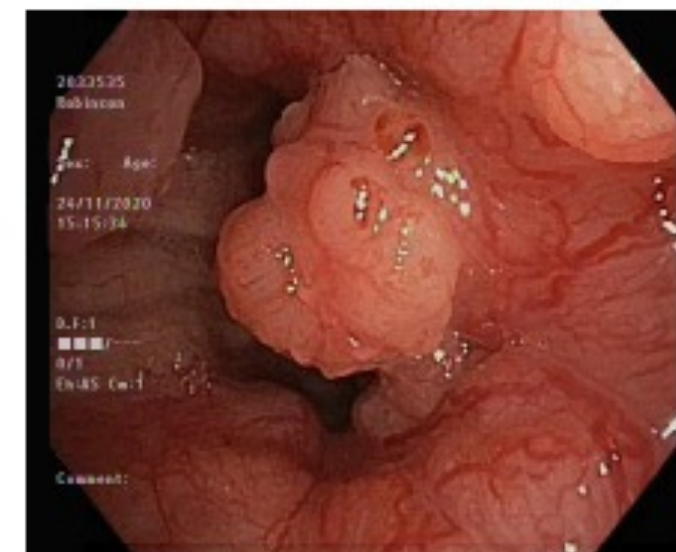
14 Trachea ; distal trachea pre-intervention



15 Trachea ; exophytic, pedunculated nodule snared and retrieved



13 Trachea ; trachea pre-biospy



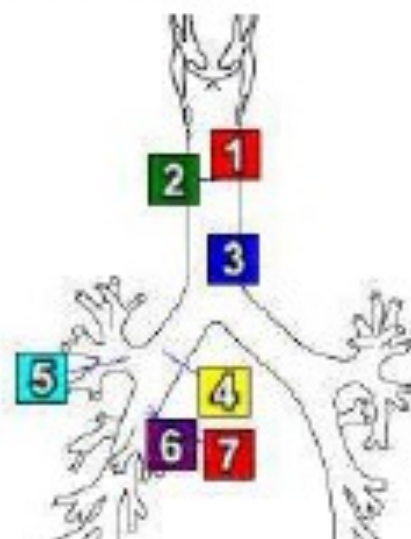
16 Trachea ; exophytic, pedunculated nodule snared and retrieved

MICROSCOPIC

Biopsy trachea polyp: Sections show polypoid fragments of bronchial mucosa covered by pseudo-stratified columnar ciliated epithelium. Subepithelial stroma shows a tumour composed of solid sheets and cribriform islands of cells. The tumour appears basaloid with interspersed luminal spaces containing mucin. There is no definite lymphovascular or perineural invasion. Additional immunohistochemistry was performed. Immunohistochemistry show no reaction for TTF-1 in tumour cells. CD117 show positive staining in tumour cells, with S100 and p63 highlighting the myoepithelial cells. Tumour cells also show positive staining for CK8/18 and CK7. Congo red stain is negative.

Overall features are consistent with a salivary-type epithelial tumour consistent with adenoid cystic carcinoma.

Add'l Images:



Tracheobronchial Tree



1 Trachea



2 Trachea



3 Trachea & main carina,
featuring L and R main
bronchus openings



4 Right mainstem bronchus



5 Right upper lobe
bronchus

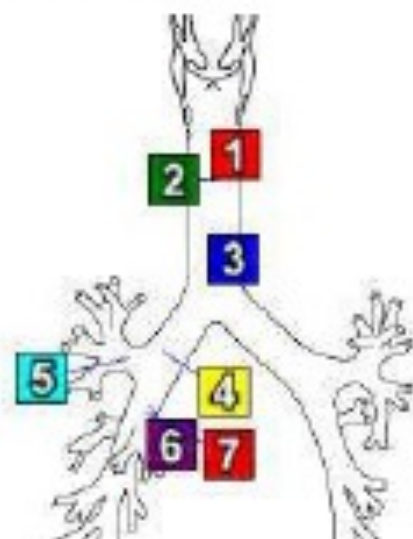


6 Bronchus intermedius



7 Bronchus intermedius
with opening of RML and
RLL bronchi

Add'l Images:



Tracheobronchial Tree



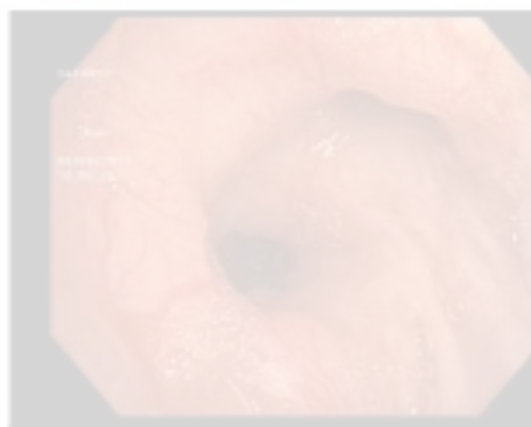
1 Trachea



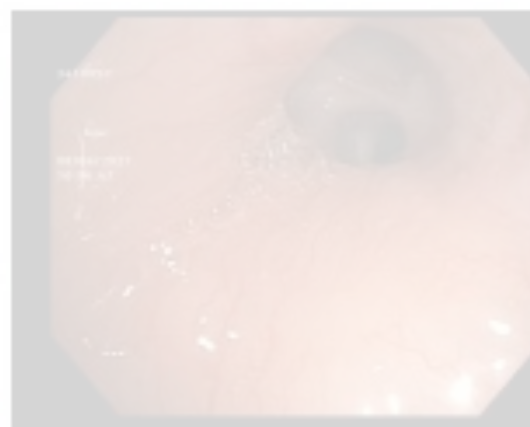
2 Trachea



3 Trachea & main carina, featuring L and R main bronchus openings



4 Right mainstem bronchus



5 Right upper lobe bronchus

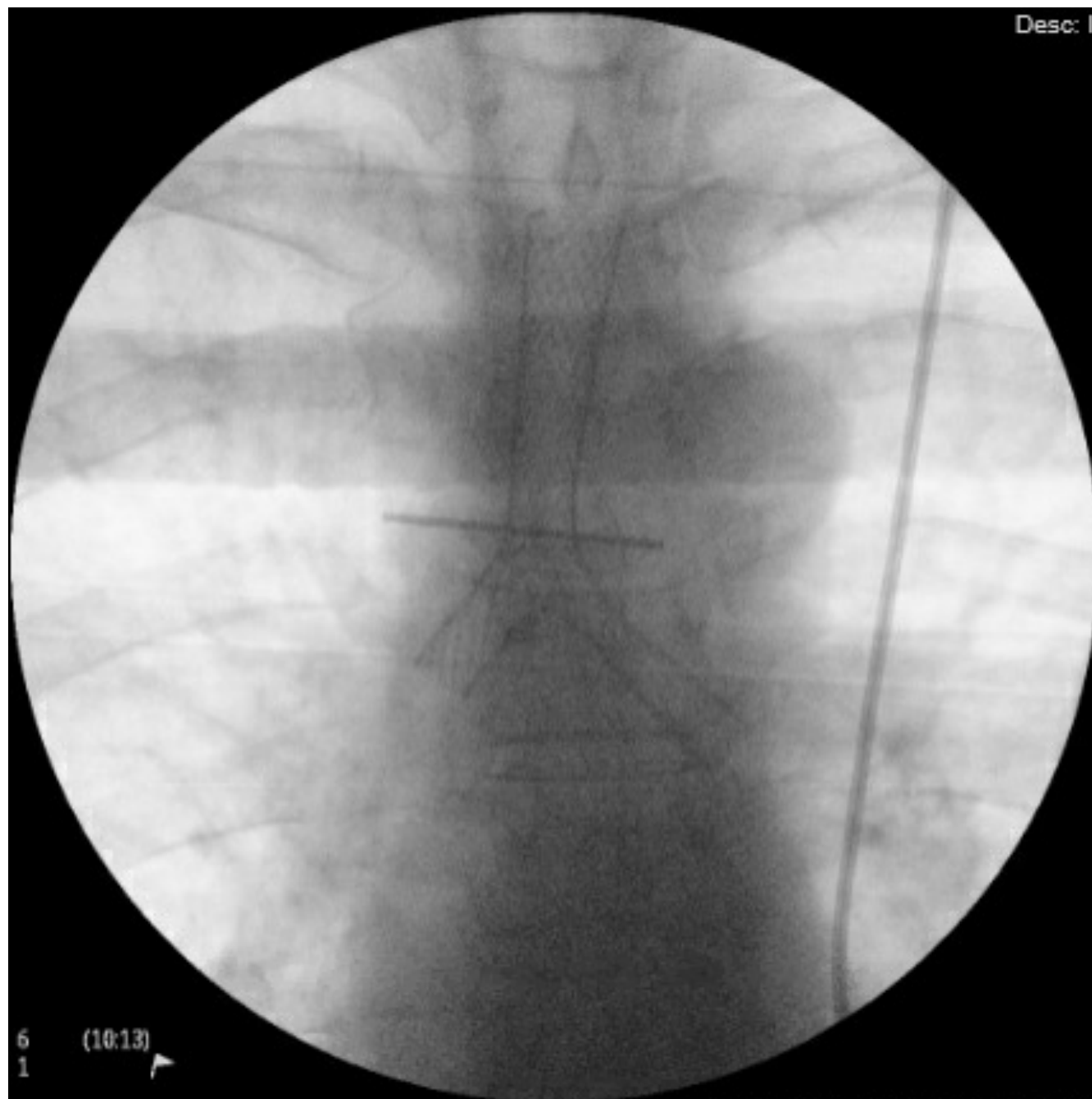


6 Bronchus intermedius



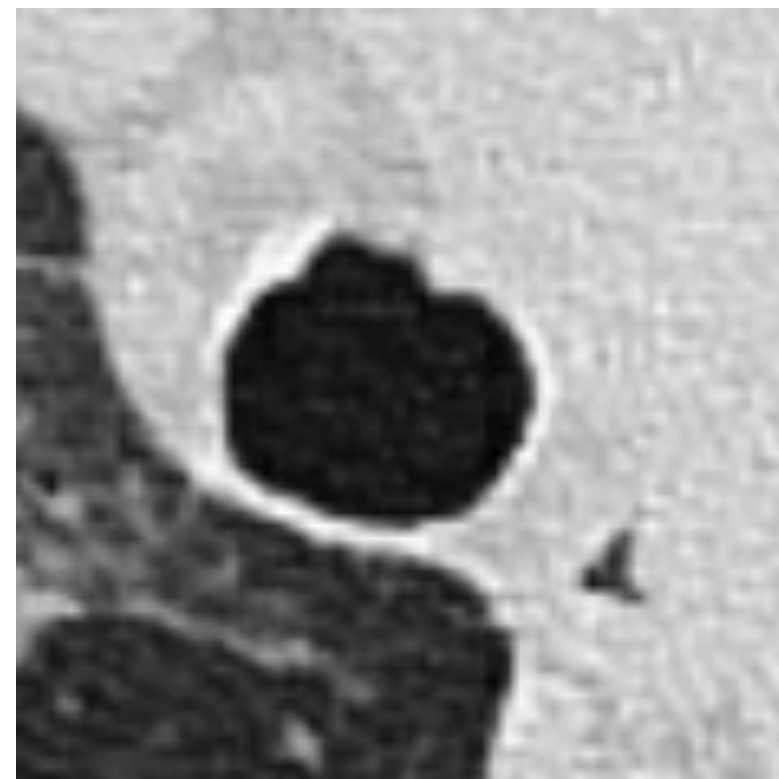
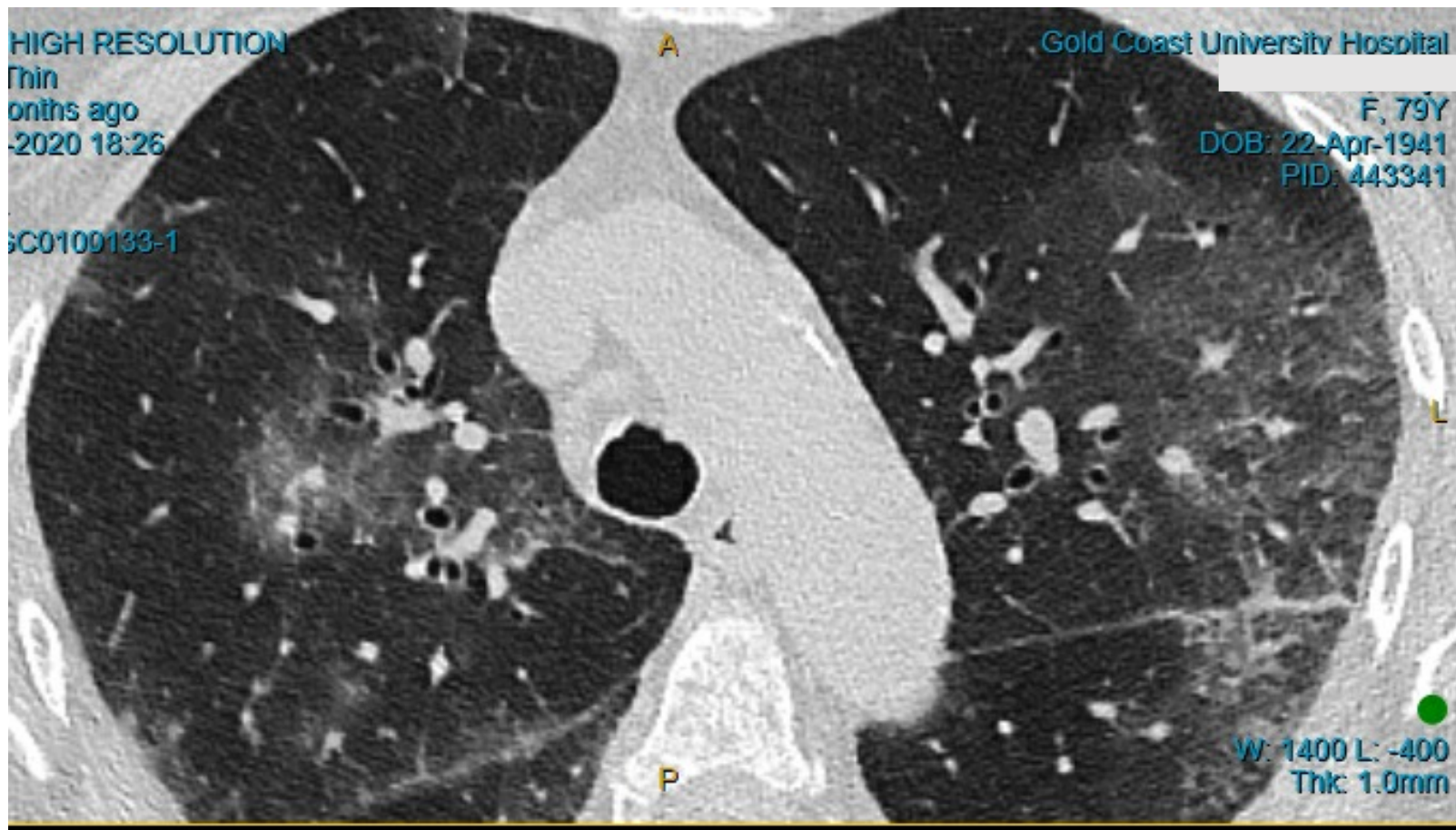
7 Bronchus intermedius with opening of RML and RLL bronchi

Desc: II BR
ACC
Stu

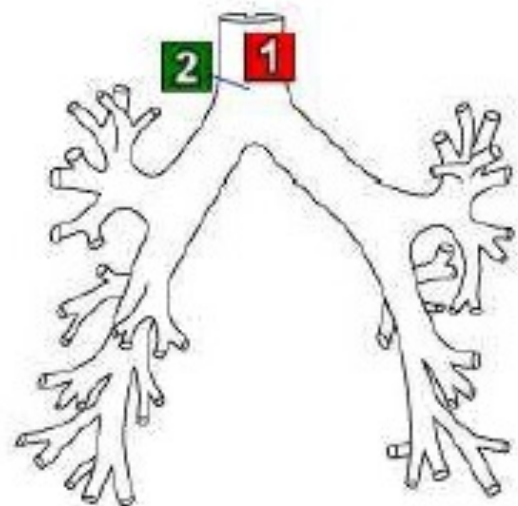


6
1 (10:13) 

Tracheobronchopathia osteochondroplastica



Add'l Images:



Tracheobronchial Tree

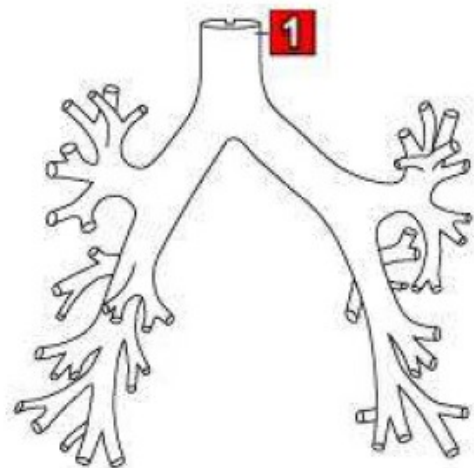


1 Trachea



2 Trachea

Add'l Images:



Tracheobronchial Tree



1 Trachea

MICROSCOPIC

Trachea nodule: The sections show surface covered by respiratory epithelium.

The subepithelium shows minor salivary glands and cartilaginous tissue. The cartilage present appears benign in appearance. There is no evidence of dysplasia or malignancy seen. Active inflammation is not seen.

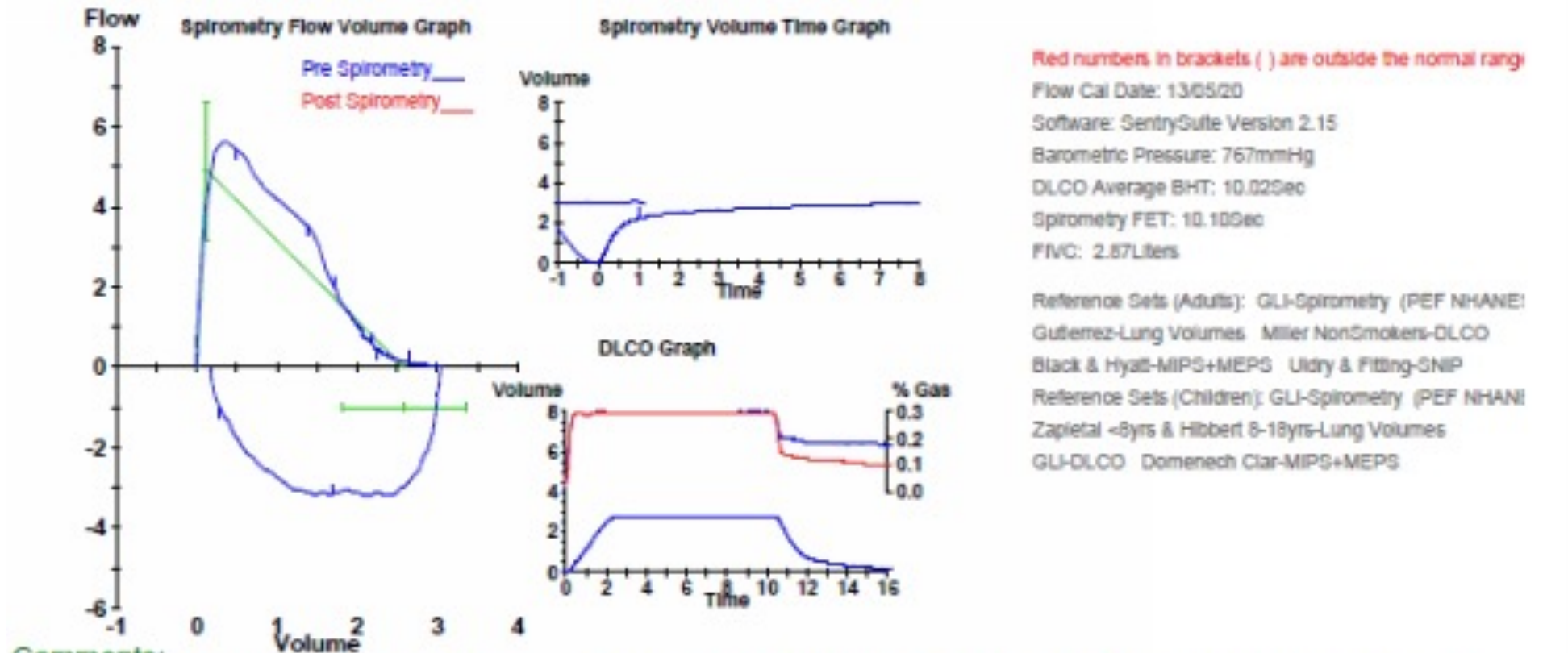
COMMENT

The morphological appearance appear consistent with the clinical diagnosis of tracheobronchopathia osteochondroplastica. Correlation with radiological features, clinical features and bronchoscopic findings is required.

SUMMARY

Trachea nodule: Morphological features are compatible with the clinical diagnosis of tracheobronchopathia osteochondroplastica. See comment above; no evidence of malignancy.

Tracheobronchopathica osteochondroplastica



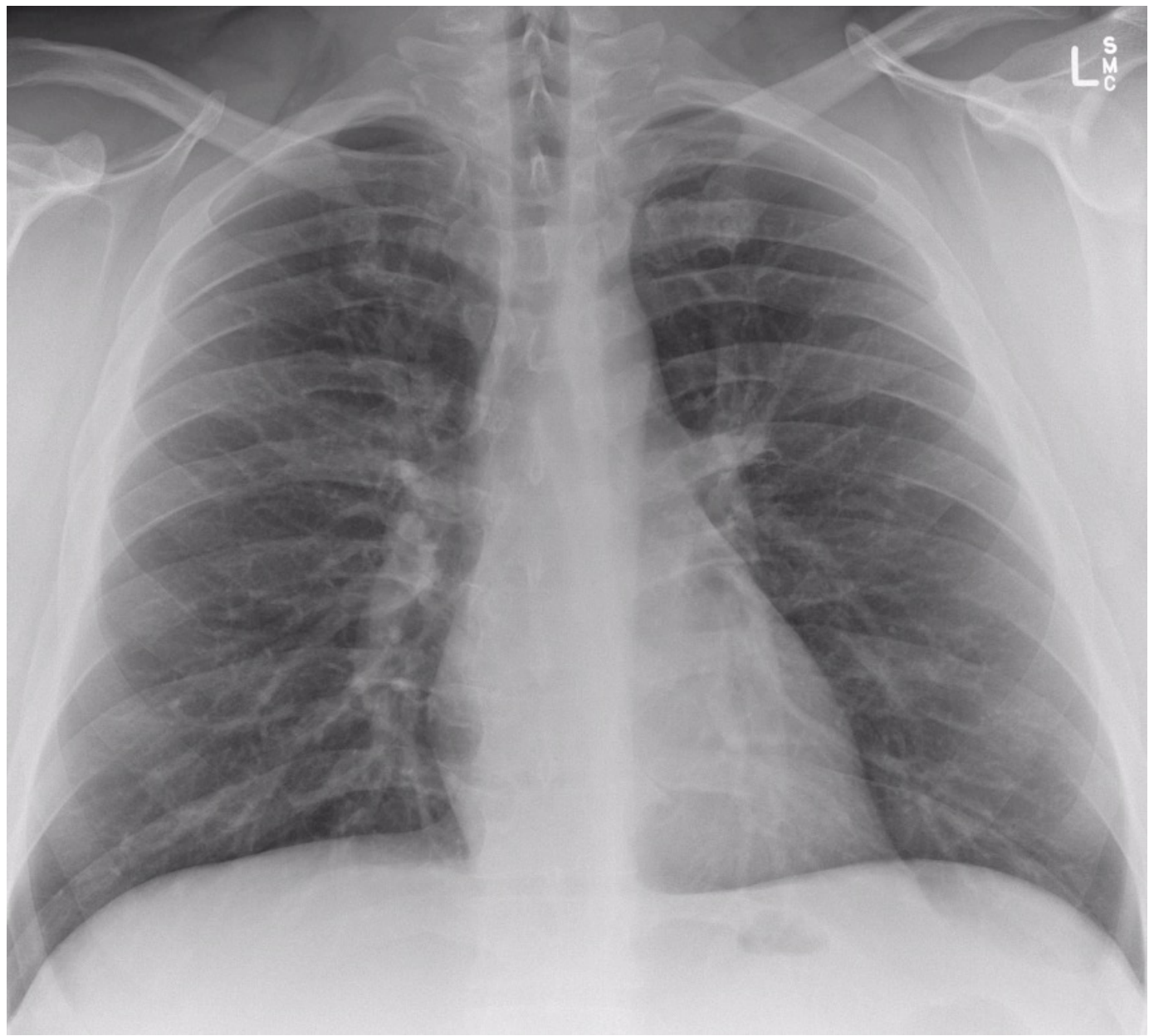
Comments:

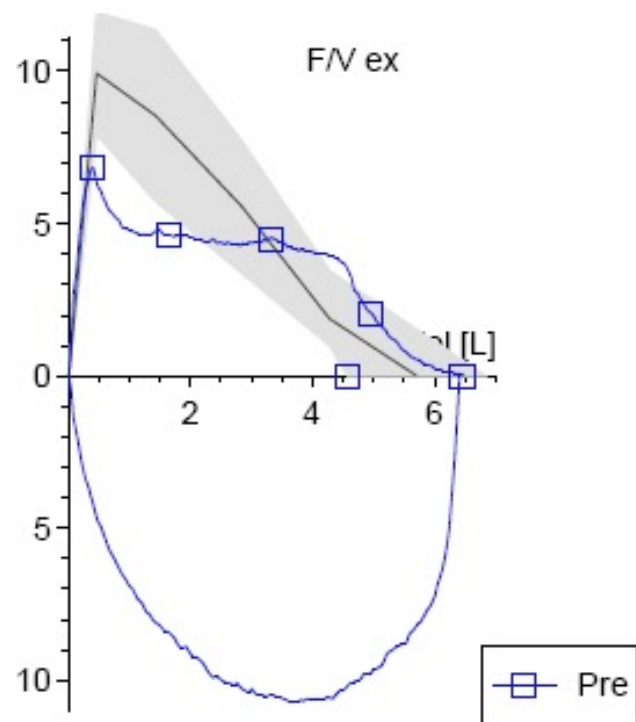
One acceptable FRC manoeuvre on static lung volumes measurements, all other results acceptable and repeatable. Spirometry performed in the sitting position. Haemoglobin value (g/dL) from blood test on 13/05/20. Note KCO (the transfer coefficient of the lung for carbon monoxide) is calculated from DLCO/VA. Nil respiratory medications on day of test.

33M - previous VC surgery ? asthma

		Ref	Pred LL	Pred UL	Pre	%Ref	Post	%Ref	%Chg	
Spirometry										
FEV 1	L	4.63	3.68	5.54	4.57	99				
FVC	L	5.69	4.56	6.82	6.46	114				
FEV 1 % FVC	%	82	71	91	<u>71</u>	87				
MFEF 75/25	L/s	4.57	2.78	6.81	4.06	89				
PEF	L/s	9.91	7.92	11.90	<u>6.85</u>	69				
FEV 0.5 / FIV 0.5										
FeNO (ppb)										
Lung Volumes										
TLC	L	7.46	6.31	8.61	8.38	112				
VC	L	5.69	4.56	6.82	6.69	118				
IC	L	3.94	3.94	3.94	5.38	136				
FRCpleth	L	3.47	2.48	4.45	3.00	87				
RV	L	1.88	1.21	2.55	1.69	90				
RV % TLC	%	27	18	36	20	75				
Diffusing Capacity										
DLCO_SB	ml/(min*mmHg)	35.3	27.4	43.3	35.9	102				
DLCOcSB	ml/(min*mmHg)	35.3	27.4	43.3	36.0	102				
KCO_SB	ml/(min*mmHg*L)	5.0	3.8	6.2	4.5	90				
KCOc_SB	ml/(min*mmHg*L)	5.0	3.8	6.2	4.5	90				
VA_SB	L	7.14	5.77	8.50	8.02	112				
IVC	L	5.69	4.56	6.82	6.53	115				
Hb	g(Hb)/dL				14.50					

Note: DLCO assumes a normal haemoglobin: 13.4g/dL females and 14.6g/dL males, unless otherwise documented.

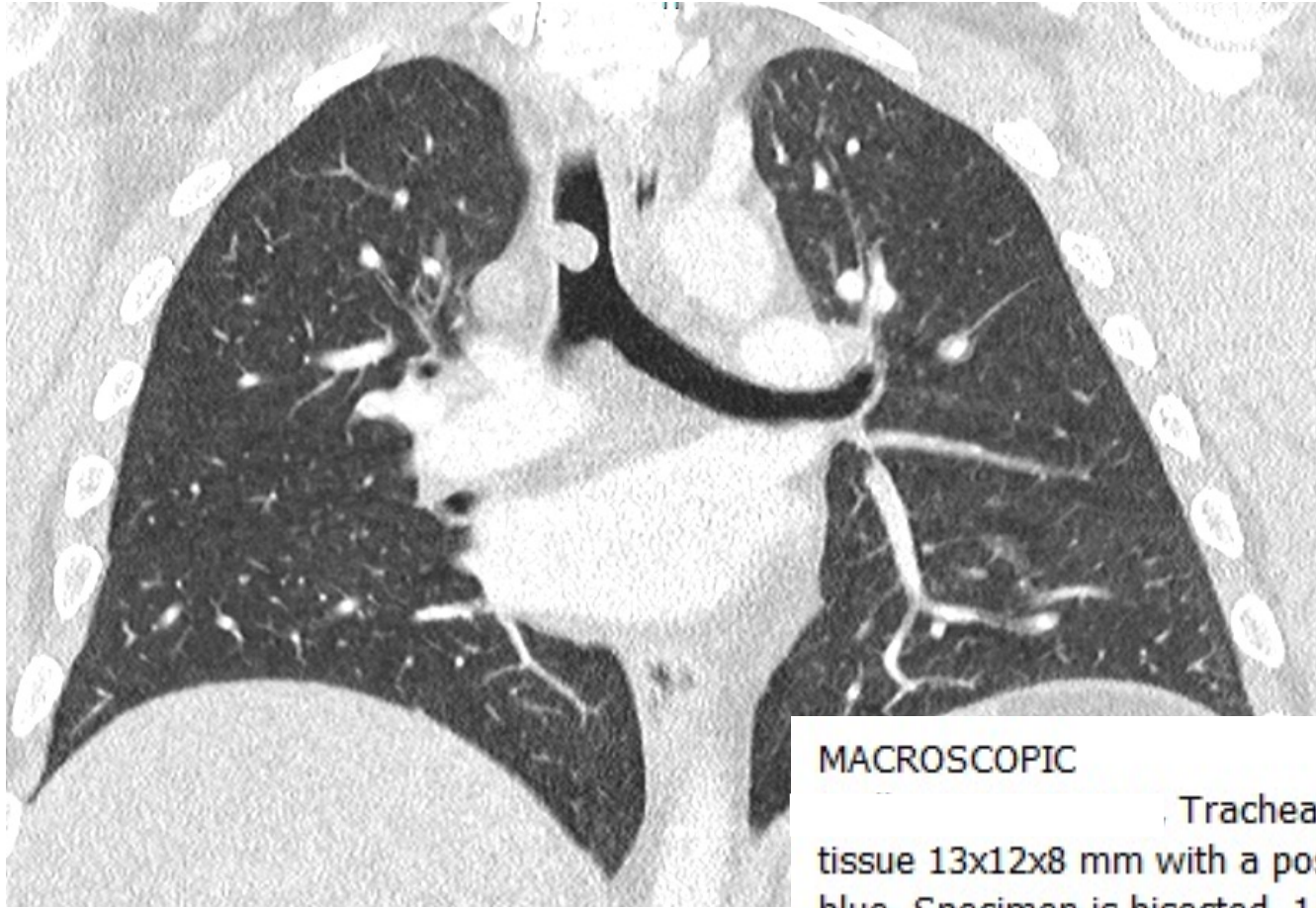




Pre BD - Top Row / Date				
<i>Parameter</i> <i>Date</i>	<i>FEV1</i> <i>(L)</i>	<i>FVC</i> <i>(L)</i>	<i>TLC</i> <i>(L)</i>	<i>DLCO_SFeNO</i> <i>(m...</i>
18/05/2018	4.50	6.28		
18/05/2018	4.75	6.15		
6/06/2018	4.57	6.46	8.38	35.9

Comments:

Technically acceptable and repeatable. Note: FVL shape is repeatable. Chest pain with each forced expiratory effort.

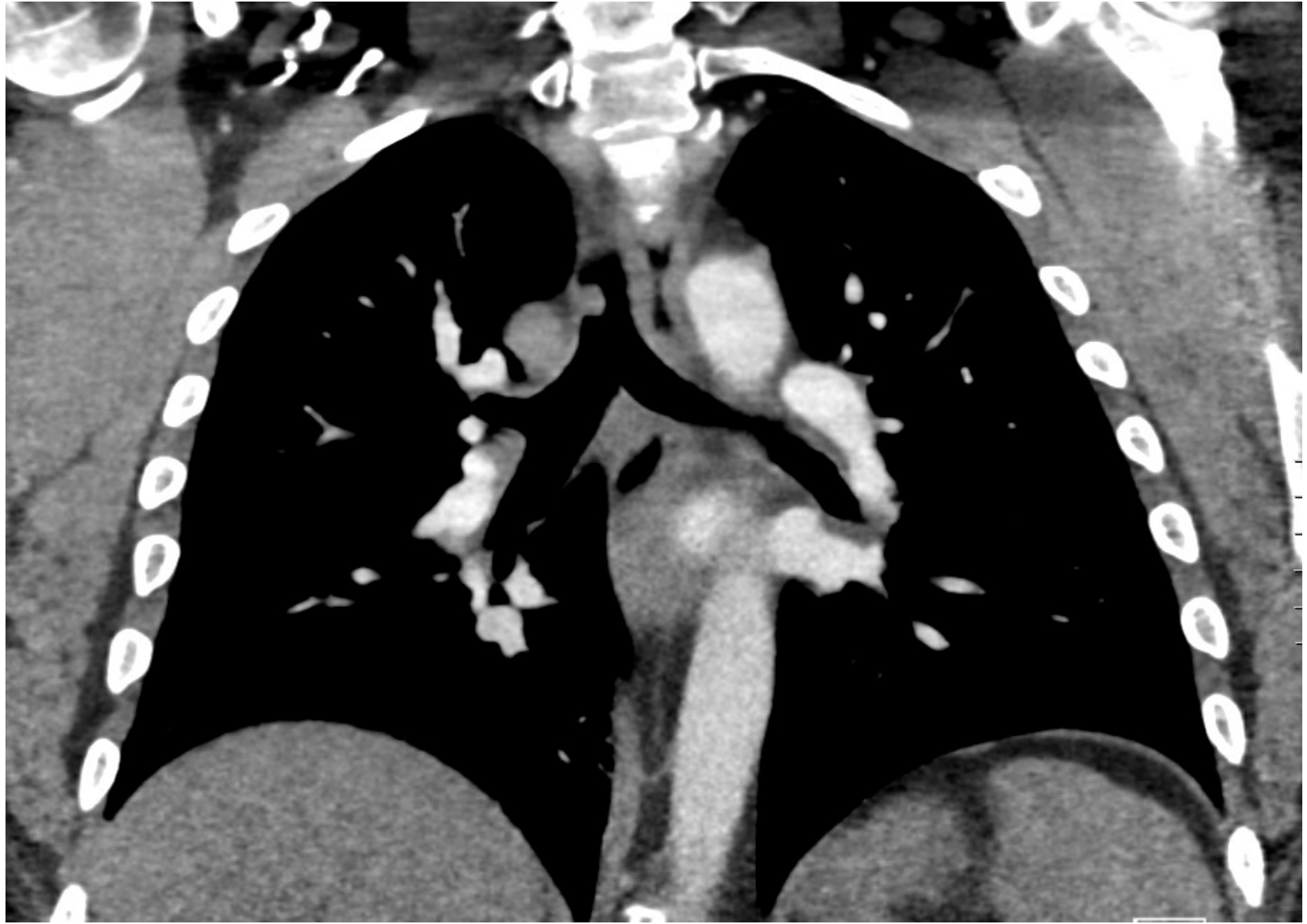


MACROSCOPIC

Tracheal tumour: A circular portion of cream and tan tissue 13x12x8 mm with a possible resection margin 7x6 mm. The margin is inked blue. Specimen is bisected. 1A specimen in toto. (T Andujar/bp1)

MICROSCOPIC

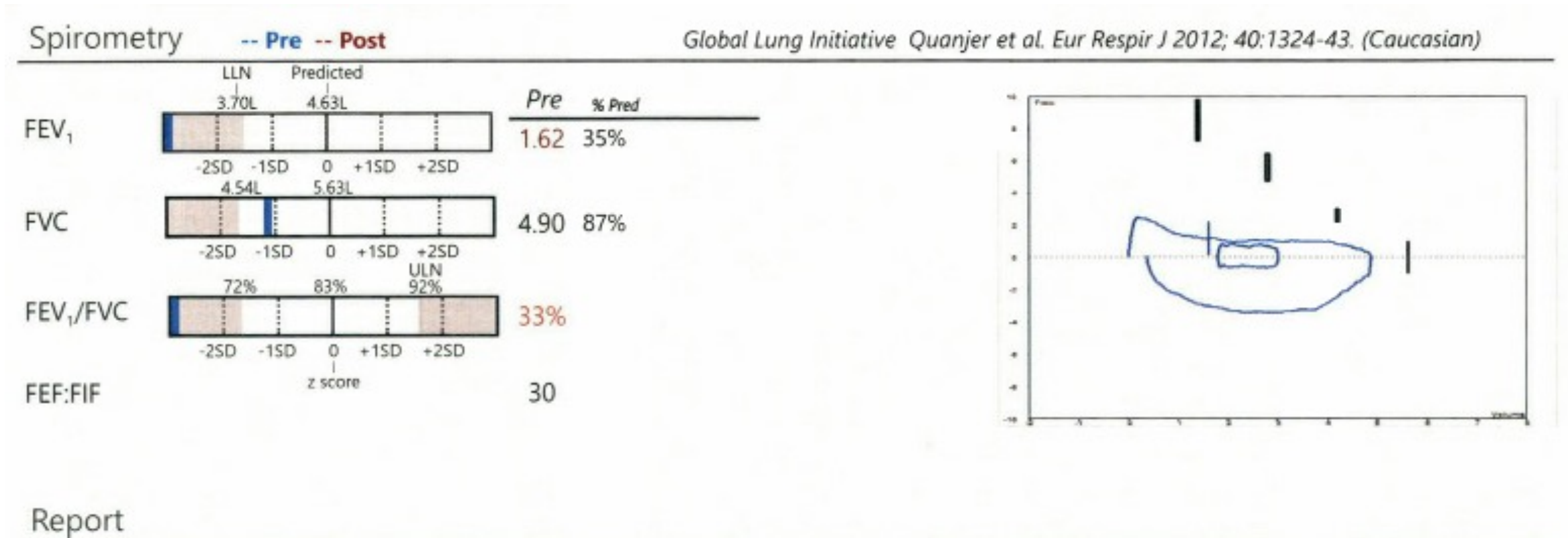
Sections of trachea show an ulcerated glomus tumour which measures 10 mm on the glass slide. There is no evidence of tumour necrosis, significant cytologic atypia, mitotic activity or atypical mitotic figures. Tumour tissue extends to the edge of the specimen.



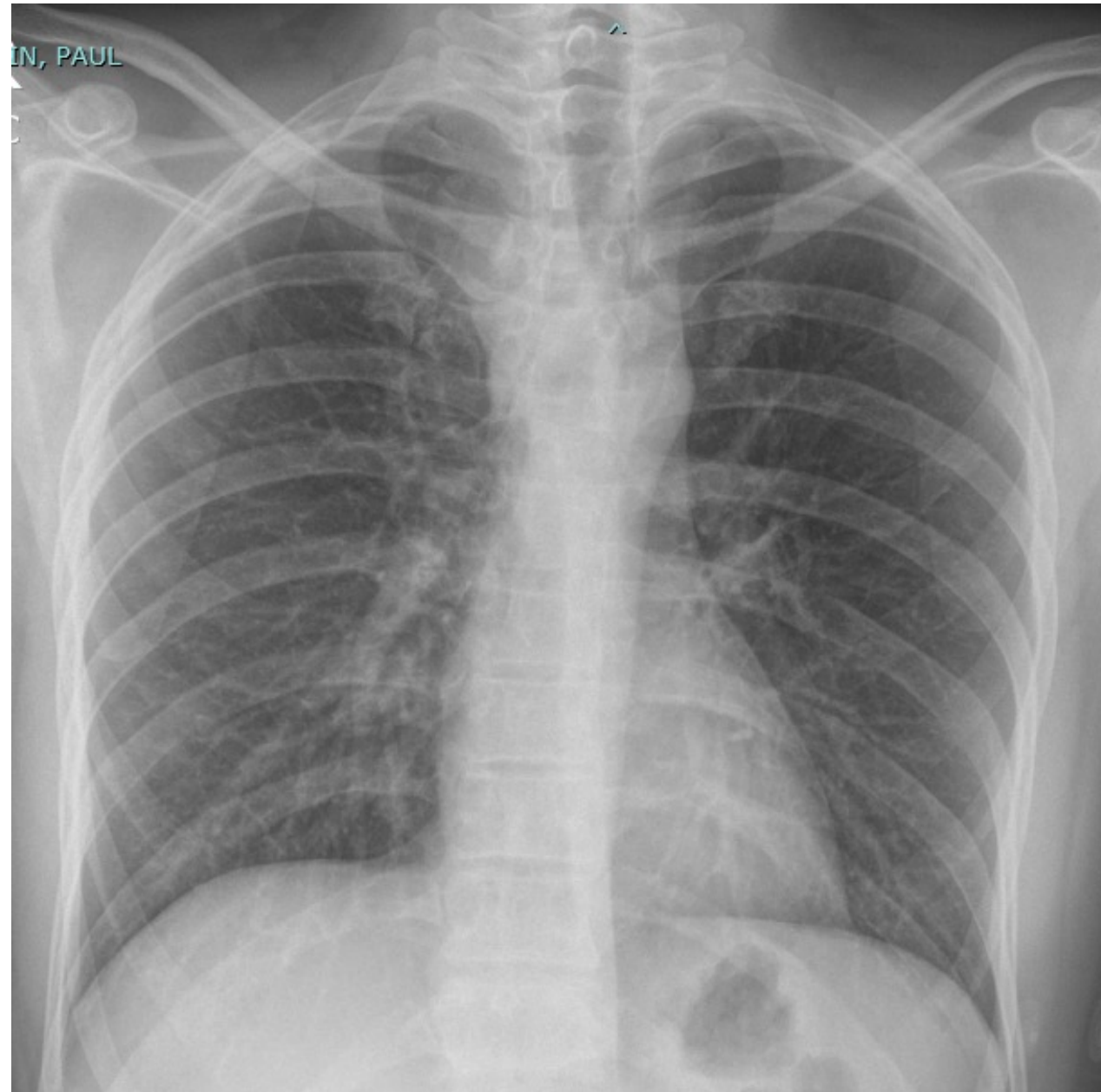
29M – cough on
b/g asthma



29M – cough on b/g asthma



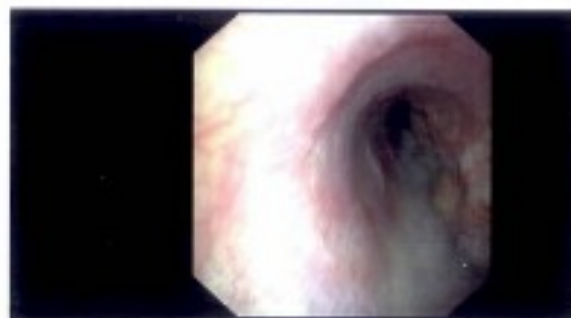
Scientific Report: Persistent cough present on most trials. One acceptable FEV₁ and repeatable FVC obtained. No bronchodilator administered due to persistent cough and associated chest pain with continued attempts.







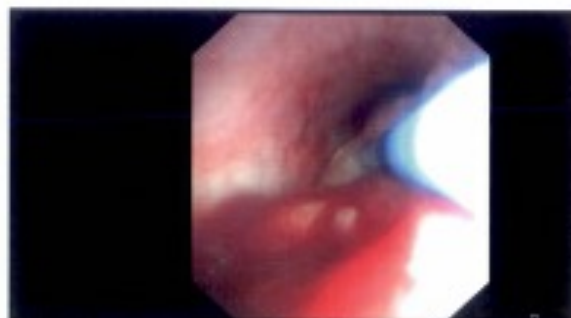
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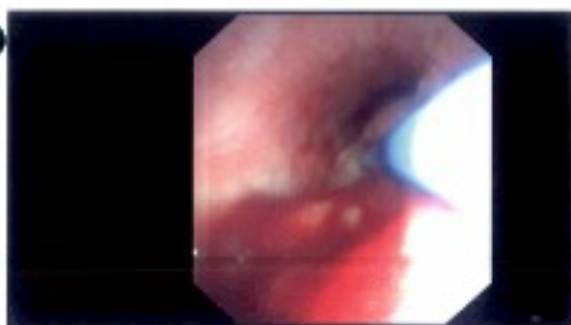
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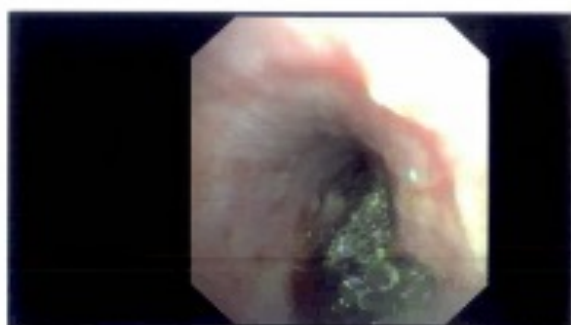
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08:53:42



08:53:42



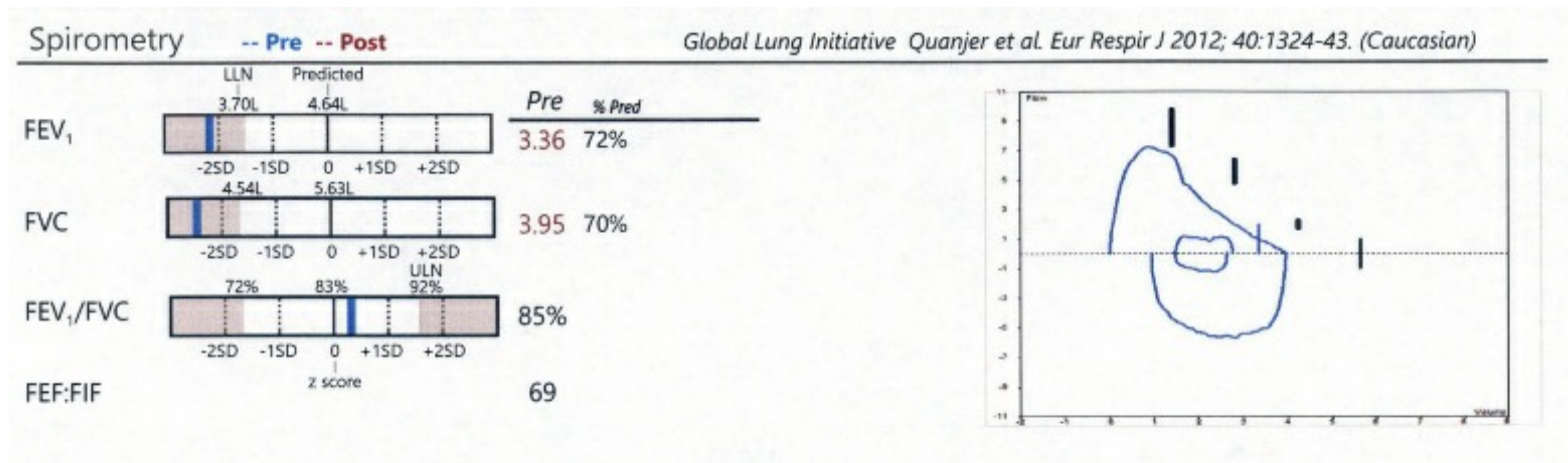
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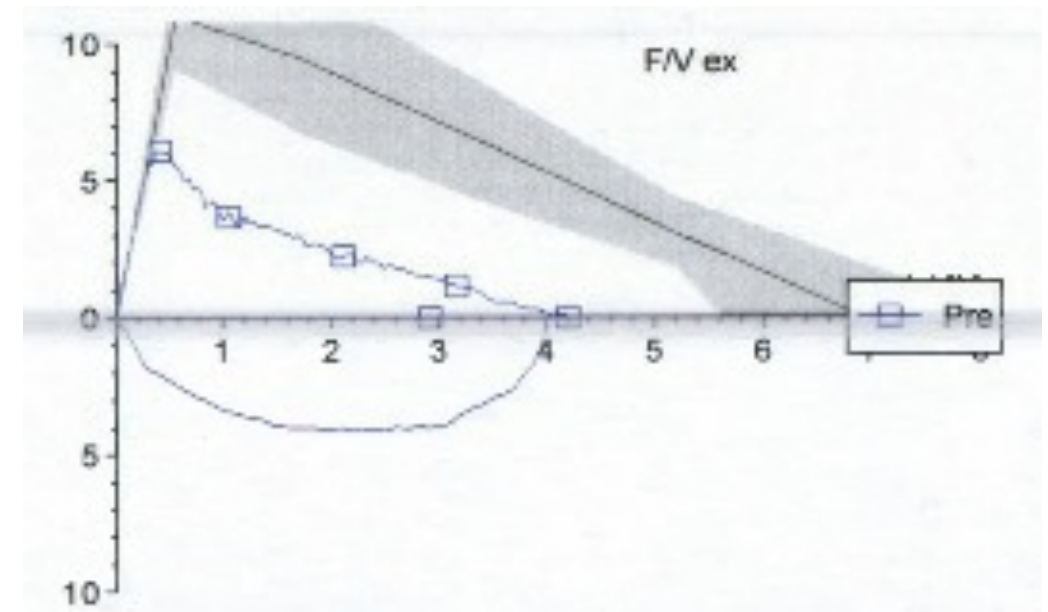
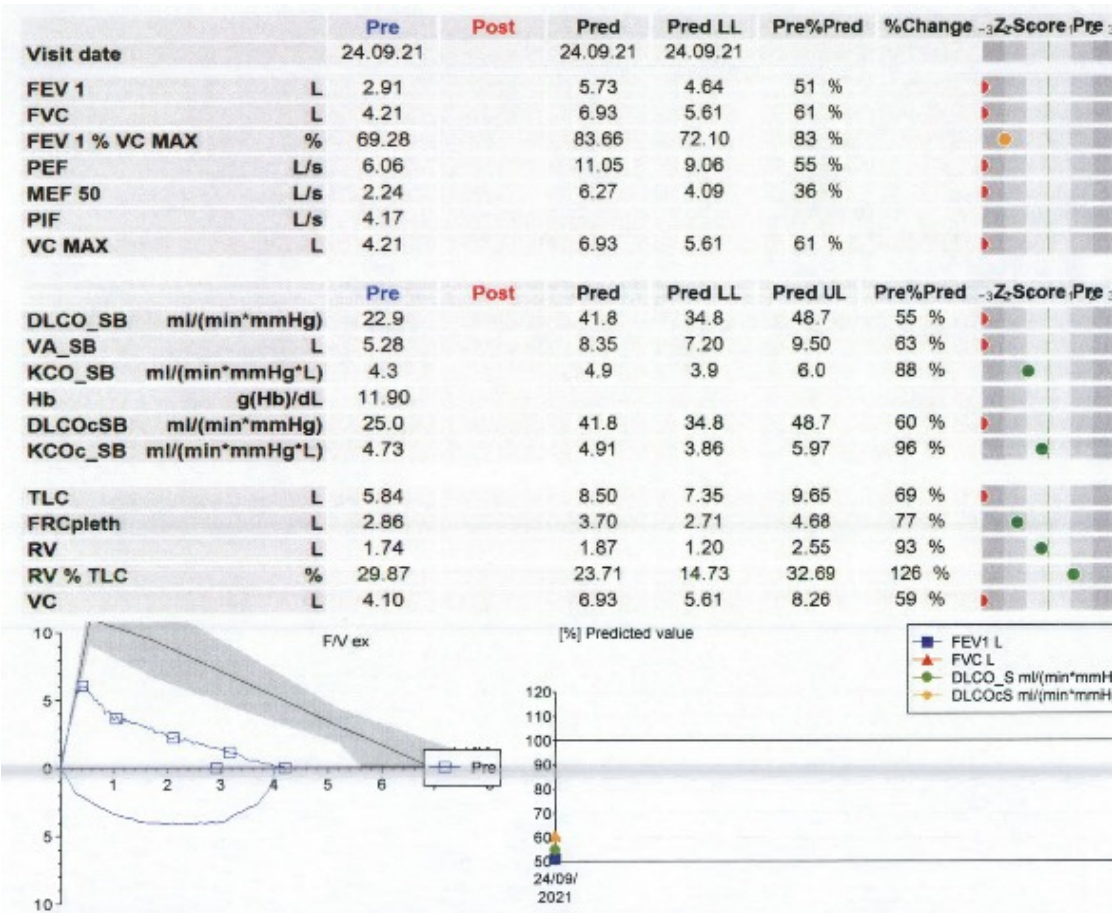
SUMMARY

1. Endotracheal lesion biopsy: Classic Hodgkin lymphoma.
2. Peritracheal biopsy: No evidence of malignancy.
3. Anterior mediastinal mass: Classic Hodgkin lymphoma.
4. Soft tissue around carotid: No evidence of malignancy.
5. Tracheal lesion: No evidence of malignancy.
6. Tracheal lesion: No evidence of malignancy.

Post debulking and chemoRx



22M – SOBOE, orthopnoea





Alpha Fetoprotein	9340 H	ug/L	(< 10)
hCG Tumour Marker	18 H	IU/L	(0.1 - 0.5)



MICROSCOPY

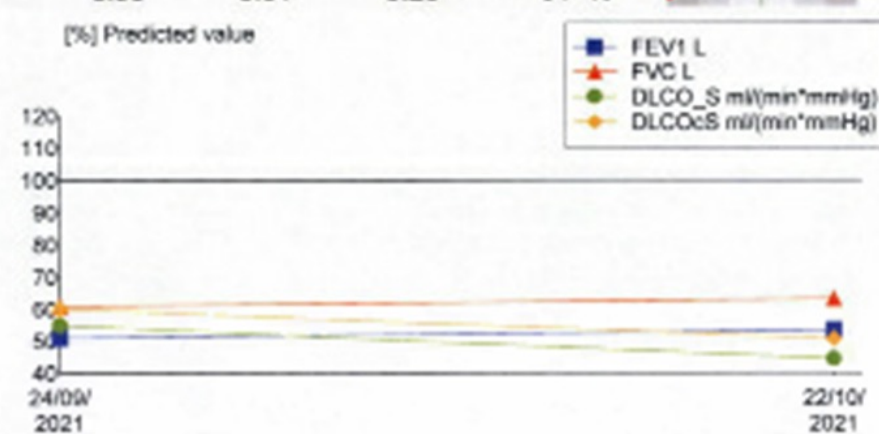
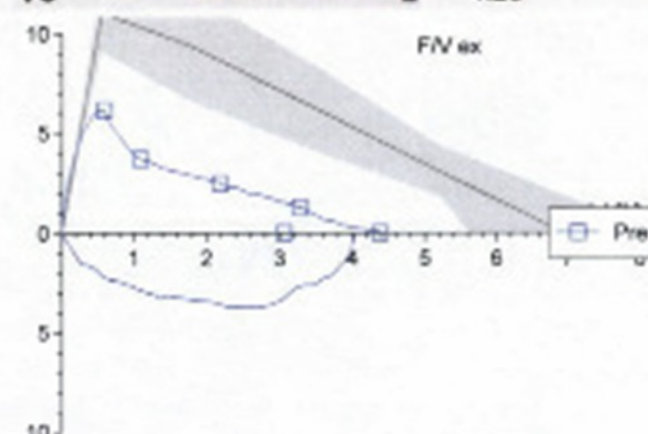
The specimen contains mesothelial cells, leucocytes, histiocytes and blood.

SUMMARY

Pericardial fluid: No malignant cells found.

		Pre	Post	Pred	Pred LL	Pre%Pred	%Change	Z-Score	Pre
Visit date		22.10.21		22.10.21	22.10.21				
FEV 1	L	3.06		5.73	4.64	53 %			
FVC	L	4.37		6.93	5.61	63 %			
FEV 1 % VC MAX	%	69.91		83.63	72.08	84 %			
PEF	L/s	6.12		11.05	9.06	55 %			
MEF 50	L/s	2.46		6.27	4.09	39 %			
PIF	L/s	3.78							
VC MAX	L	4.37		6.93	5.61	63 %			

		Pre	Post	Pred	Pred LL	Pred UL	Pre%Pred	Z-Score	Pre
DLCO_SB	ml/(min*mmHg)	18.6		41.8	34.8	48.7	44 %		
VA_SB	L	5.14		8.35	7.20	9.50	62 %		
KCO_SB	ml/(min*mmHg*L)	3.6		4.9	3.9	6.0	74 %		
Hb	g(Hb)/dL	10.90							
DLCOcSB	ml/(min*mmHg)	21.2		41.8	34.8	48.7	51 %		
KCOc_SB	ml/(min*mmHg*L)	4.12		4.91	3.86	5.97	84 %		
TLC	L	5.98		8.50	7.35	9.65	70 %		
FRCpleth	L	2.95		3.70	2.71	4.68	80 %		
RV	L	1.72		1.87	1.20	2.55	92 %		
RV % TLC	%	28.77		23.71	14.73	32.69	121 %		
VC	L	4.26		6.93	5.61	8.26	61 %		



		Ref	Pred LL	Pred UL	Pre	%Ref
Spirometry - Quanjer GLI 2012-						
FEV 1	L	1.95	1.48	2.41	1.33	68
FVC	L	2.43	1.85	3.04	2.37	97
FEV 1 % FVC	%	81	68	91	56	70
MFEF 75/25	L/s	1.95	1.01	3.21	0.68	35
PEF	L/s	5.34	4.00	6.68	2.73	51
FEV 0.5 / FIV 0.5					0.60	
IC	L	1.94	1.31	2.58	1.60	82
VC EX	L	2.43	1.85	3.04	2.40	99

FeNO (ppb)

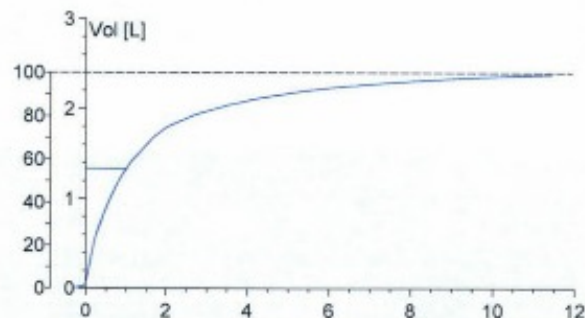
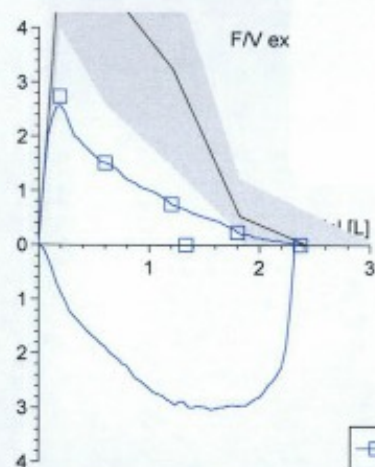
Diffusing Capacity -Stanojevic GLI 2020-

DLCO_SB	ml/(min*mmHg)	16.3	12.5	20.9	17.5	107
DLCOcSB	ml/(min*mmHg)	16.3	12.5	20.9	17.9	110
KCOc_SB	ml/(min*mmHg*L)	4.6	3.5	5.7	5.5	120
VA_SB	L	3.61	2.92	4.36	3.25	90
IVC	L	2.43	1.85	3.04	2.21	91
Hb	g(Hb)/dL				12.70	

Measurement device

PFT

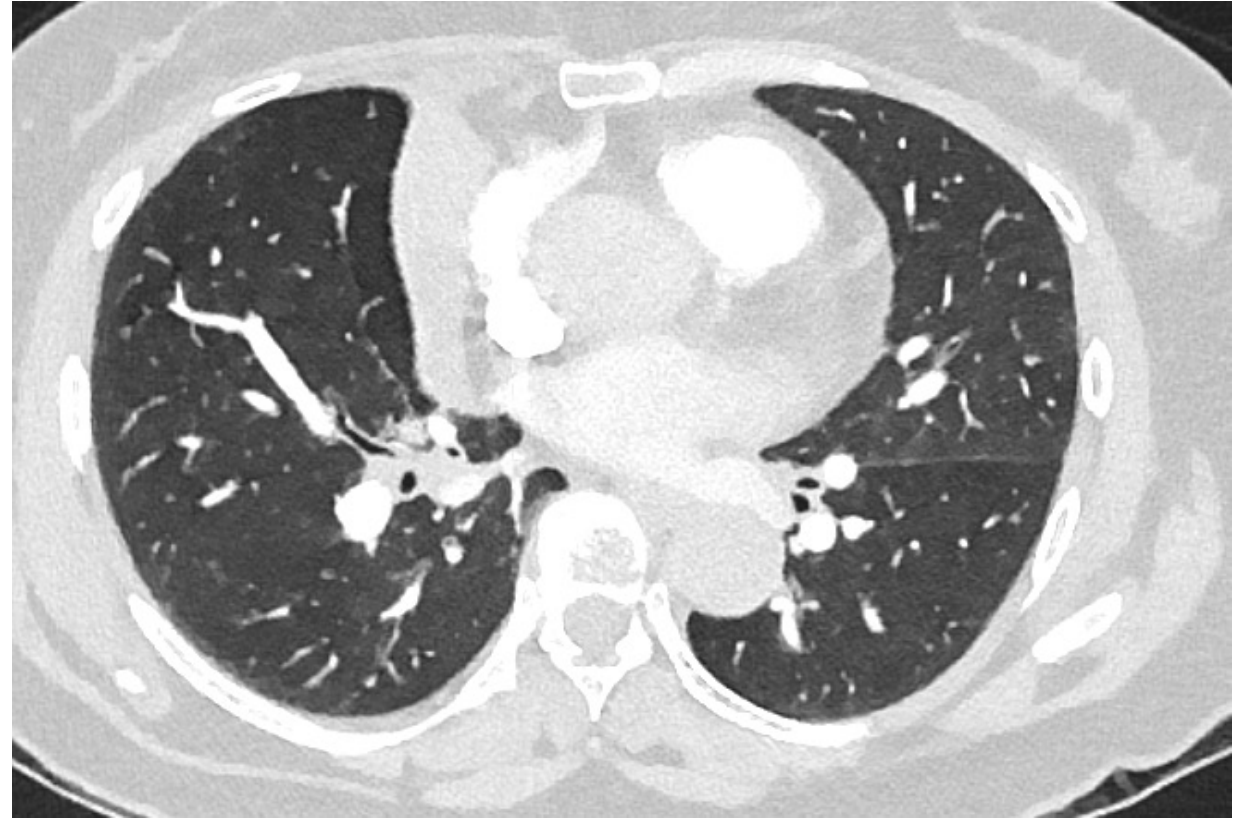
Hemocue Hb, otherwise assumes: 13.4g/dL females and 14.6g/dL males if no Hb.

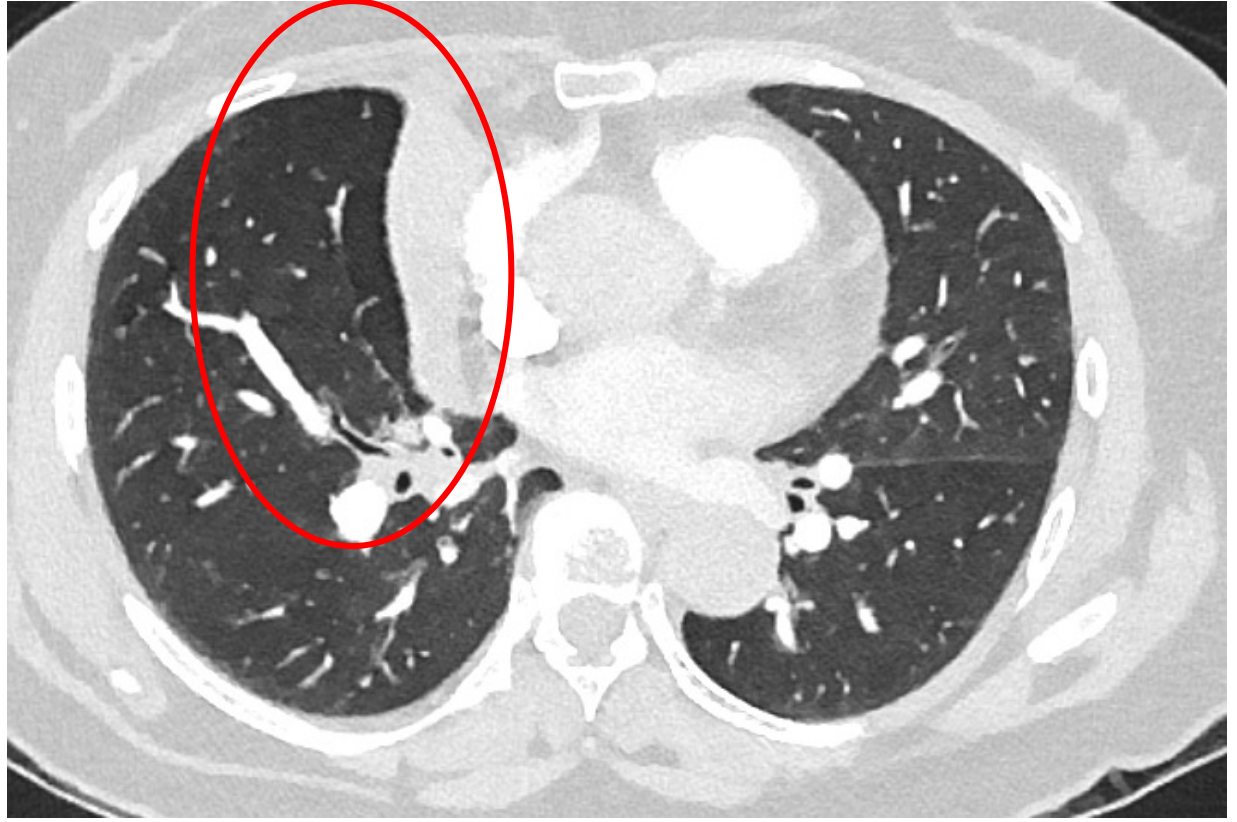
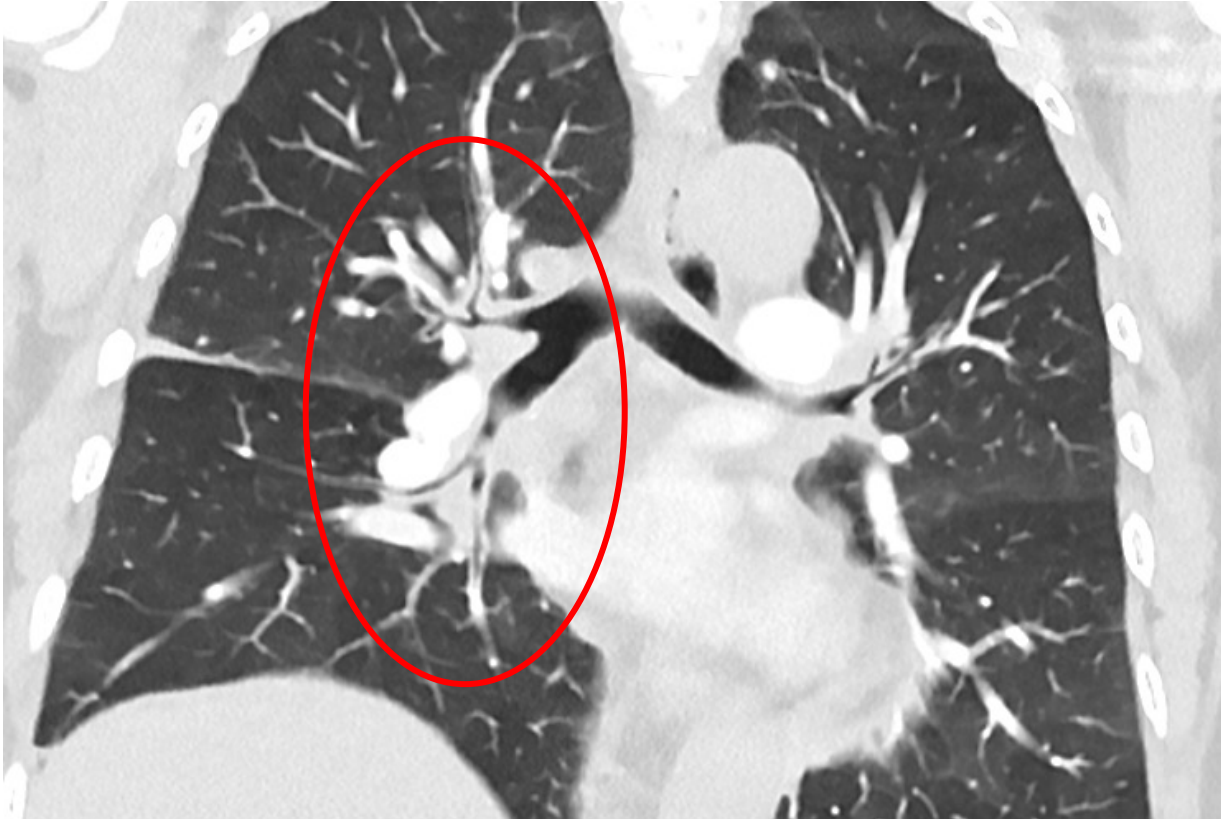


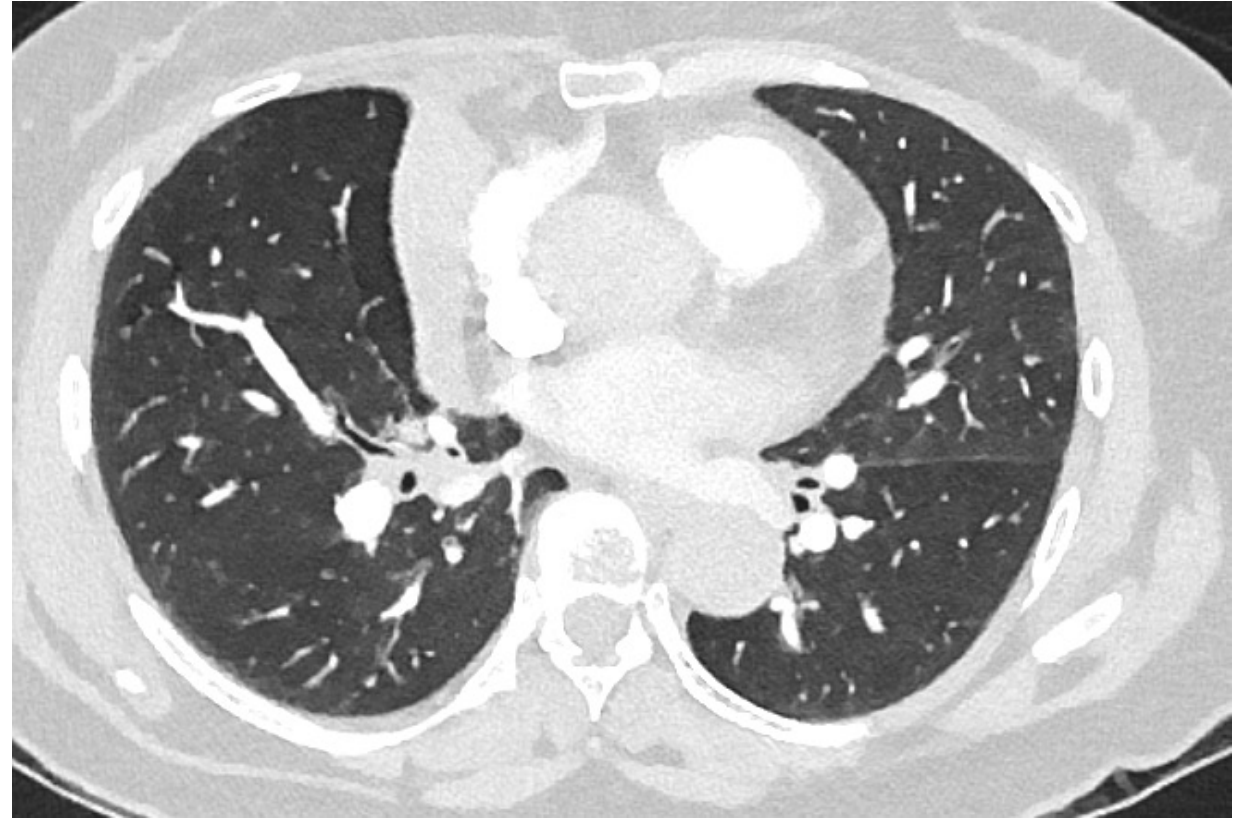
Technical Comments:

Temp: 36.4°C. BP: 146/91, HR: 77bpm, SpO2: 97%. Onbrez taken 3 hours prior. Technically acceptable and repeatable.

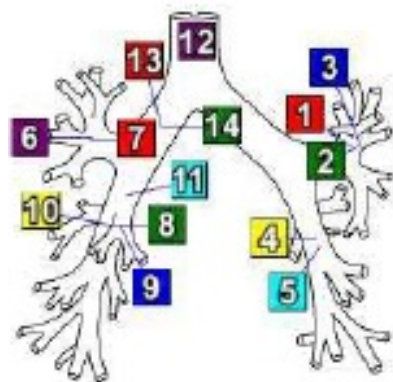




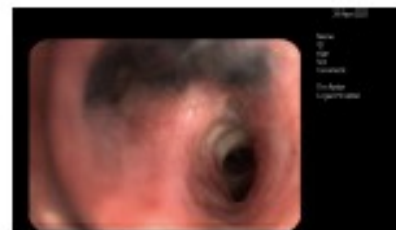




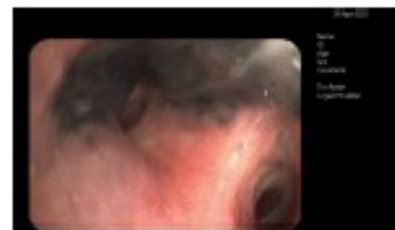
Add'l Images:



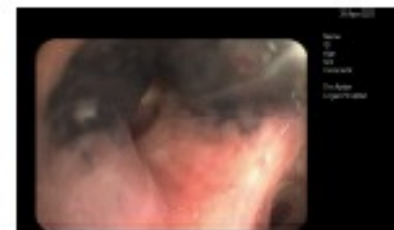
Tracheobronchial Tree



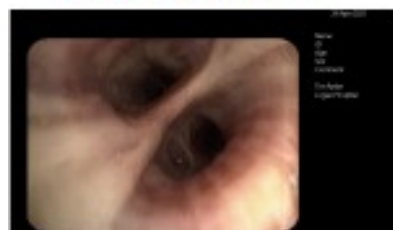
1 Left upper lobe



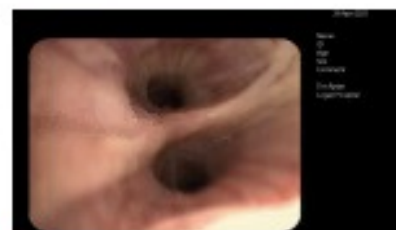
2 Left upper lobe



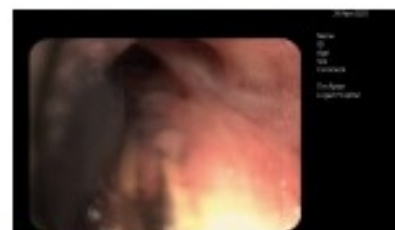
3 Left upper lobe ; LB1/2



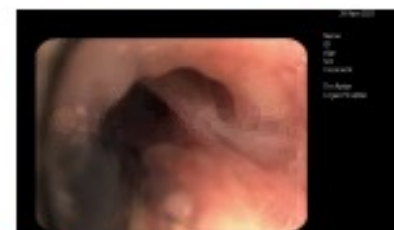
4 Left lower lobe



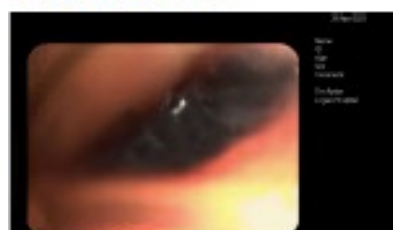
5 Left lower lobe ; LLL



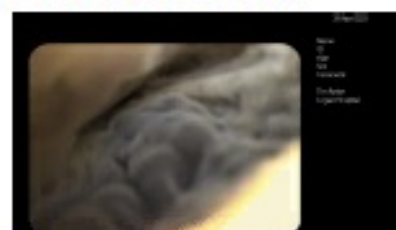
6 Right upper lobe



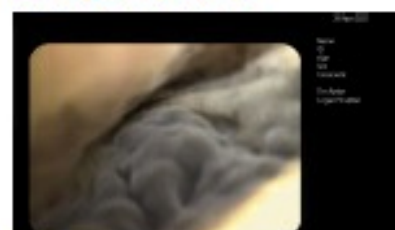
7 Right upper lobe



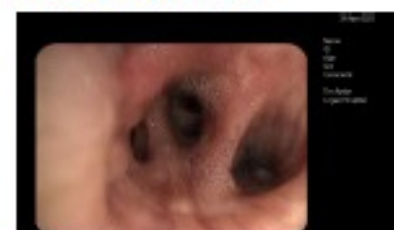
8 Right middle lobe



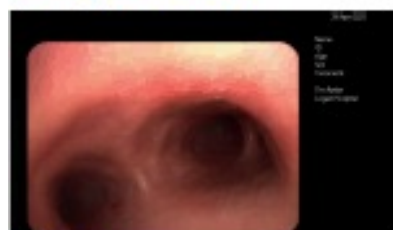
9 Right middle lobe



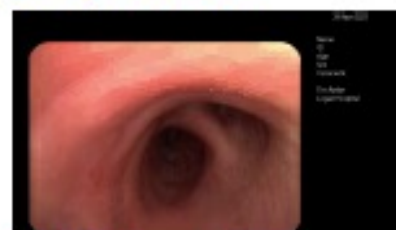
10 Right middle lobe



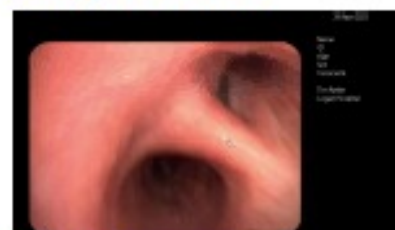
11 Bronchus intermedius



12 Trachea

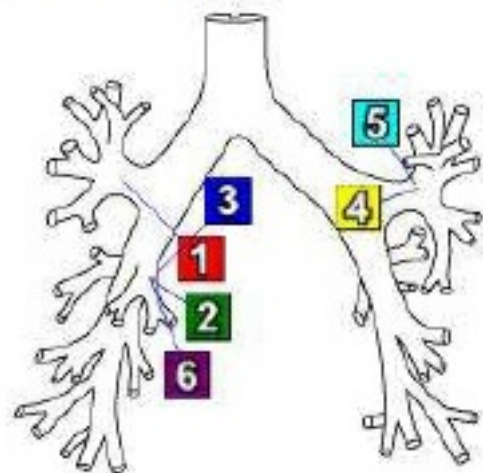


13 Right mainstem bronchus



14 Right mainstem bronchus ; RMB

Add'l Images:



Tracheobronchial Tree



1 Right upper lobe ; RUL



2 Right middle lobe ; RML



3 Right middle lobe ; RML



4 Left upper lobe ; LUL



5 Left upper lobe ; LB1+2 & 3

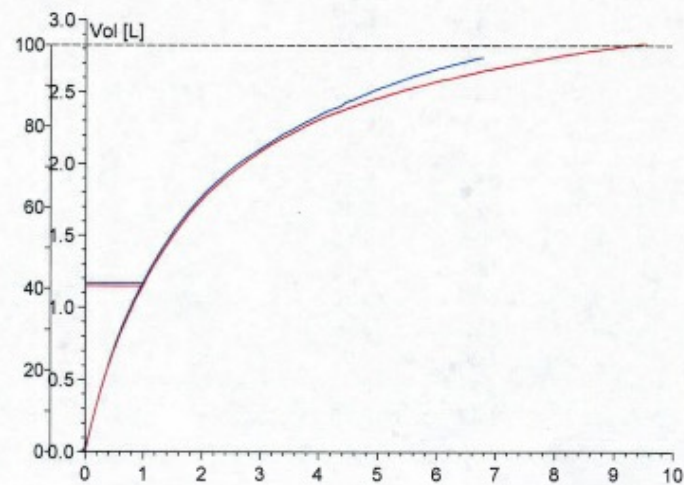
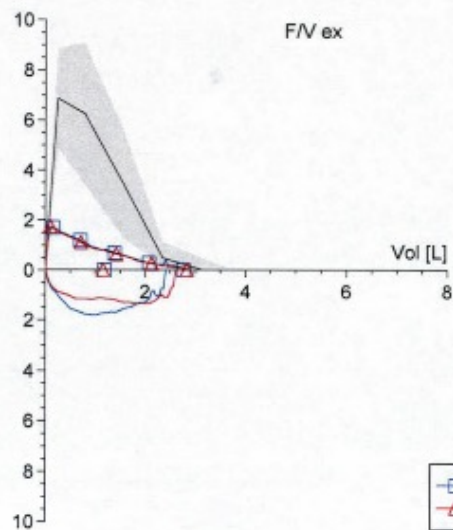


6 Right middle lobe ; RML

77M GP referred with calcified adenopathy ?
TB

		Pred	Pred LL	Pred UL	Pre	%Pred	Post	%Pred	%Chg	Z-Score
Spirometry -Quanjer GLI 2012-										
FEV 1	L	2.36	1.87	2.82	<u>1.17</u>	50	<u>1.15</u>	49	-2	
FVC	L	3.14	2.58	3.70	2.75	88	2.83	90	3	
VC EX	L	3.14	2.58	3.70	2.75	88	2.83	90	3	
FEV 1 % FVC	%	76	64	87	<u>43</u>	56	<u>41</u>	54	-5	
PEF	L/s	6.86	4.87	8.85	<u>1.70</u>	25	<u>1.72</u>	25	1	
FEV 0.5 / FIV 0.5					0.76		1.02		34	
FeNO	(ppb)				20					
Measurement device										

		Pred	Pred LL	Pred UL	Pre	%Pred	Post	%Pred	%Chg	Z-Score Pred
Spirometry -Quanjer GLI 2012-										
FEV 1	L	2.36	1.87	2.82	1.17	50	1.15	49	-2	★
FVC	L	3.14	2.58	3.70	2.75	88	2.83	90	3	★
VC EX	L	3.14	2.58	3.70	2.75	88	2.83	90	3	★
FEV 1 % FVC	%	76	64	87	43	56	41	54	-5	★
PEF	L/s	6.86	4.87	8.85	1.70	25	1.72	25	1	★
FEV 0.5 / FIV 0.5					0.76		1.02		34	
FeNO (ppb)					20					
Measurement device										

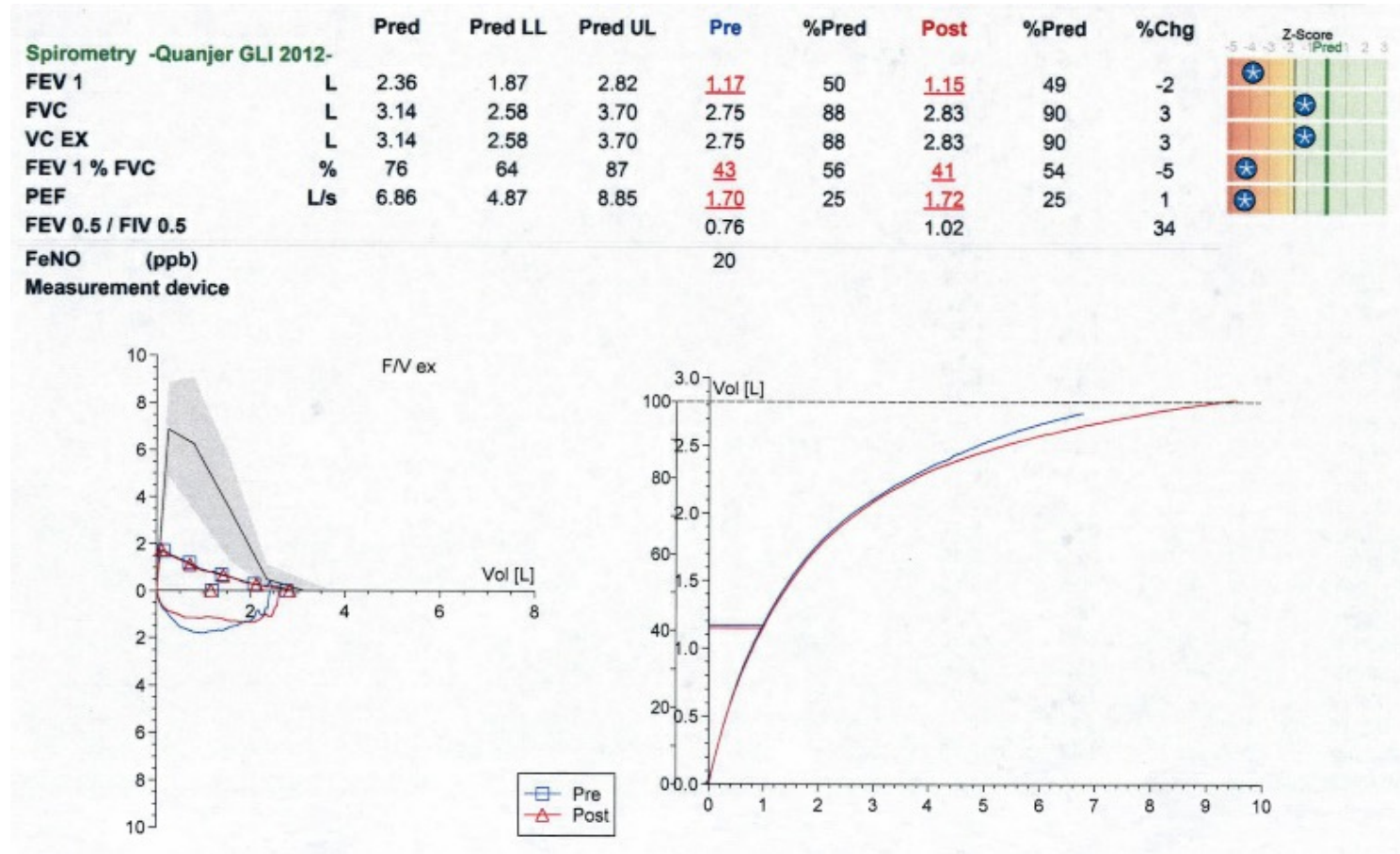




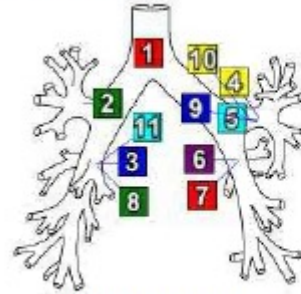
Broncholiths ?



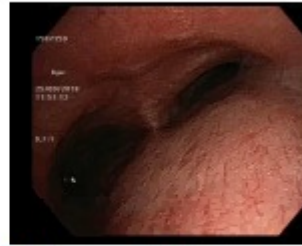
Progressive Anthracofibrosis... Again



Add'l Images:



Tracheobronchial Tree



1 Trachea + EDAC



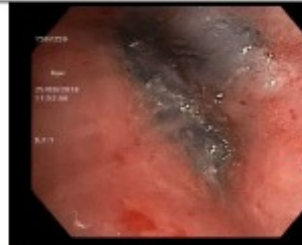
2 Right upper lobe pre procedure



3 Bronchus intermedius with right middle lobe at 10 oclock - pre procedure



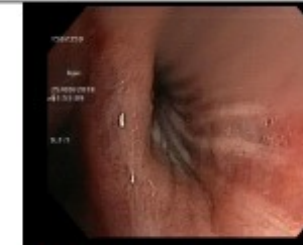
4 Left upper lobe pre procedure



5 Left upper lobe pre procedure



6 Left lower lobe pre procedure



7 Left lower lobepre procedure



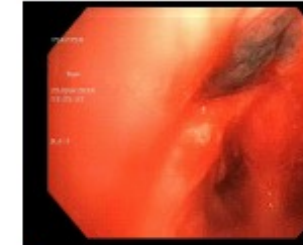
8 post procedure



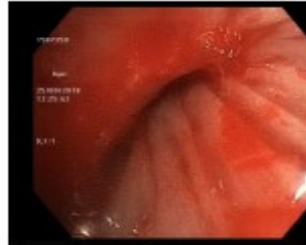
9 Left upper lobe post procedure



10 Left upper lobe post procedure



11 Bronchus intermedius post procedure

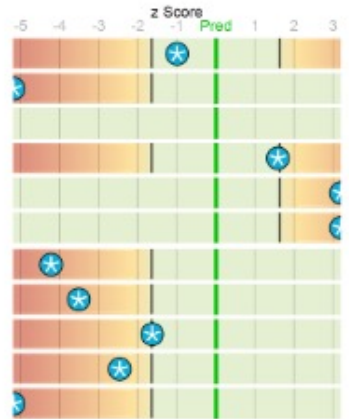
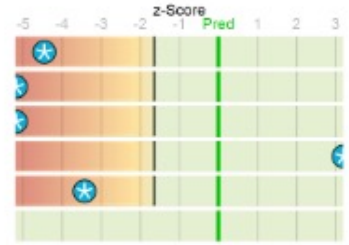
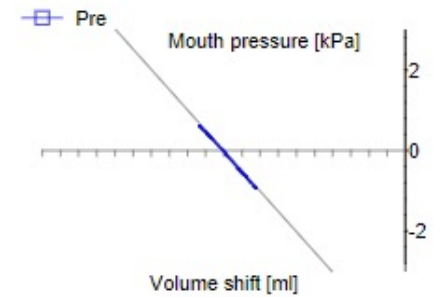
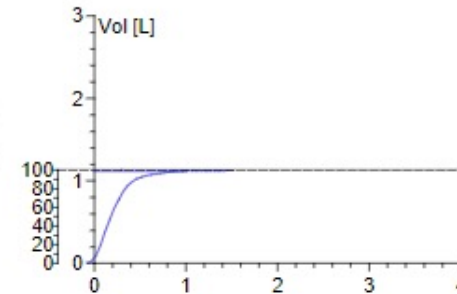
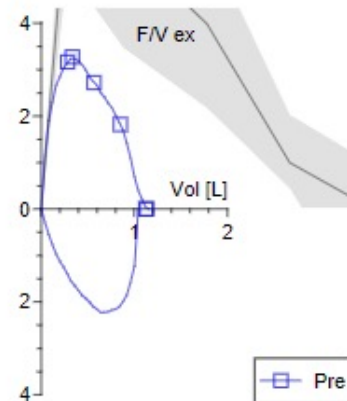


12

THE END



		Pred LL	Pred UL	Pre	%Pred
Spirometry -Quanjer GLI 2012-					
FEV 1	L	2.25	3.45	1.12	39
FVC	L	2.80	4.34	1.13	32
VC MAX	L	2.80	4.34	1.14	32
FEV 1 % FVC	%	70	90	99	122
PEF	L/s	5.15	8.60	3.27	48
FEV 0.5 / FIV 0.5				1.15	
FeNO (ppb)					
Lung Volumes -Hall GLI 2020-					
TLC	L	4.01	5.98	4.39	88
VC	L	2.80	4.34	1.14	32
IC	L	2.21	2.21	0.90	41
FRCpleth	L	1.88	3.53	3.50	129
RV	L	1.13	2.28	3.26	191
RV % TLC	%	25	45	74	212
Diffusing Capacity - Stanojevic GLI 2020-					
DLCO_SB	ml/(min*mmHg)	16.5	26.4	10.9	52
DLCOcSB	ml/(min*mmHg)	16.5	26.4	12.2	58
KCOc_SB	ml/(min*mmHg*L)	3.4	5.4	3.4	78
VA_SB	L	4.01	5.84	3.60	74
IVC	L	2.80	4.34	1.09	31
Hb	g(Hb)/dL			10.30	
Pressure	mmHg			764	



Knee

		Pred	Pred LL	Pred UL	Pre	%Pred	Post	%Post	%Chg	
Spirometry -Quanjer GLI 2012-										
FEV 1	L	3.27	2.44	4.06	3.37	103	3.39	103	0	
FVC	L	4.24	3.21	5.28	3.85	91	3.86	91	0	
VC EX	L	4.65	3.71	5.62	3.86	83	3.86	83	-0	
FEV 1 % FVC	%	77	65	88	88	113	88	113	0	
PEF	L/s	8.65	6.46	10.84	12.15	140	11.75	136	-3	
FEV 0.5 / FIV 0.5					1.77		1.42		-19	
FeNO (ppb)										
Lung Volumes -Hall GLI 2020-										
TLC	L	6.76	5.40	8.13	5.27	78				
VC	L	4.65	3.71	5.62	3.86	83				
IC	L	3.38	2.37	4.34	3.04	90				
FRCpleth	L	3.44	2.38	4.77	2.24	65				
RV	L	2.17	1.33	3.17	1.41	65				
RV % TLC	%	32	22	42	27	85				
Diffusing Capacity - Stanojevic GLI 2020-										
DLCO_SB	ml/(min*mmHg)	25.6	19.1	33.3	18.5	72				
DLCOcSB	ml/(min*mmHg)	25.6	19.1	33.3	19.0	74				
KCOc_SB	ml/(min*mmHg*L)	4.2	3.2	5.4	4.0	95				
VA_SB	L	6.09	4.92	7.35	4.72	77				
IVC	L	4.65	3.71	5.62	3.53	76				
Hb	g(Hb)/dL				13.80					
Pressure	mmHg				764		750			

