Airways Disease

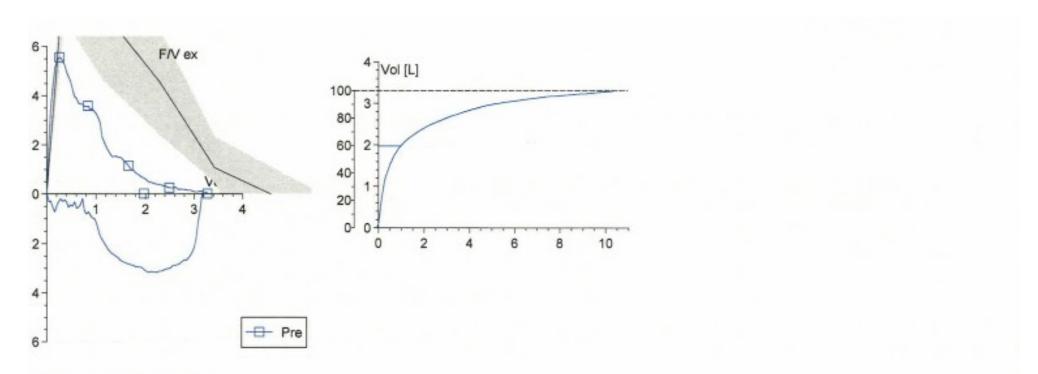
Dr Jon Banks *MBBS B.Pharm Clin Dip Pall Med* JP(Qual)

Respiratory and Sleep and General and Acute Medicine Advanced Trainee

Logan Hospital

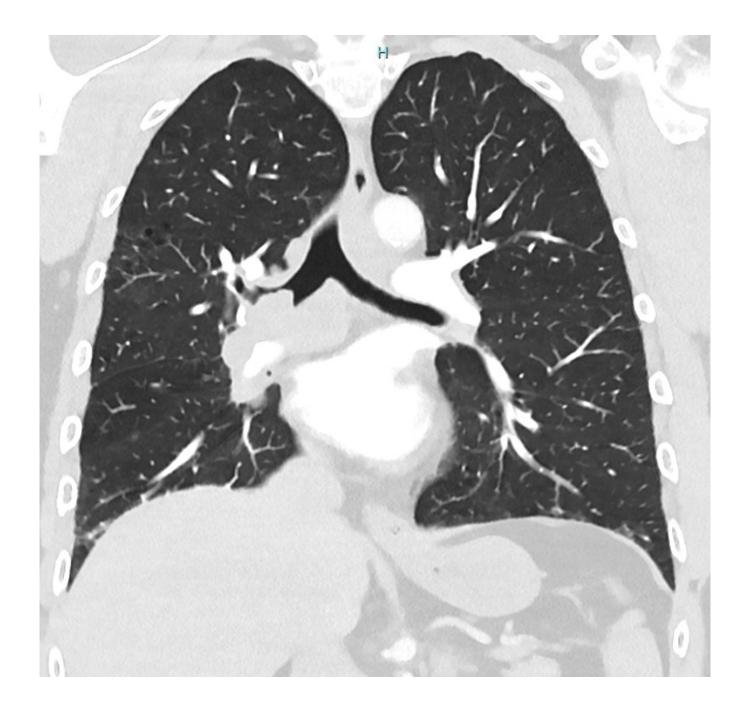
53M – smoker with SOBOE

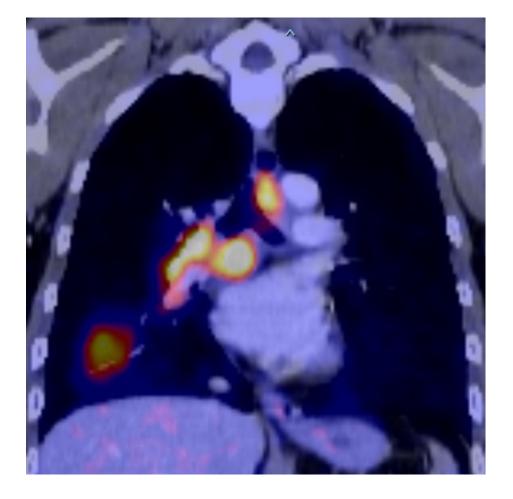
Respira	tory Fun	CUO	n ke	port - S	pirom	etry, DL	.CO, Fe	NU N	lisit date	16.07.21
Physician: SES Module: Height: Race:	Box 173 cm Caucasian			Ag We	ferred: le: eight: edication:	Inpt- ED 53 Years 72.8 kg Nil Resp		Scientist: Smoking History: BMI: Bronchodilator:	Ex-Smoker 24 kg/m ² Pre- BD Only	
			Ref	Pred LL	Pred UL	Pre	%Ref			Z-Score
	- Quanjer GLI	2012-							-5 -4 -3	2 Pred1 2 3
FEV 1		L	3.60	2.78	4.38	1.96	54		8	
FVC		L	4.57	3.54	5.61	3.27	72			8
FEV 1 % FVC		%	79	68	89	60	76			
MFEF 75/25		L/s	3.24	1.70	5.26	0.79	24		G	
PEF		L/s	9.25	7.06	11.45	5.54	60			
FEV 0.5 / FIV	0.5					0.95			P. ALCO	
IC		L	3.57	2.53	4.57	2.14	60		1.000	
VC EX		L	4.97	3.97	6.00	3.31	67			
FeNO (ppb)									
Diffusing Car	pacity -Stanoje	vic G	LI 2020-						-5 -4 -3	Z-Score
DLCO_SB	ml/(min*mm		27.2	20.7	34.9	18.1	67			
DLCOcSB	ml/(min*mm		27.2	20.7	34.9	18.1	66			
KCOc_SB	ml/(min*mmH		4.4	3.4	5.6	4.1	91		1.251	8
VA_SB		L	6.18	5.01	7.43	4.46	72			
IVC		L	4.97	3.97	6.00	3.18	64			
Hb	g(Hb)/dL				14.70			The C	

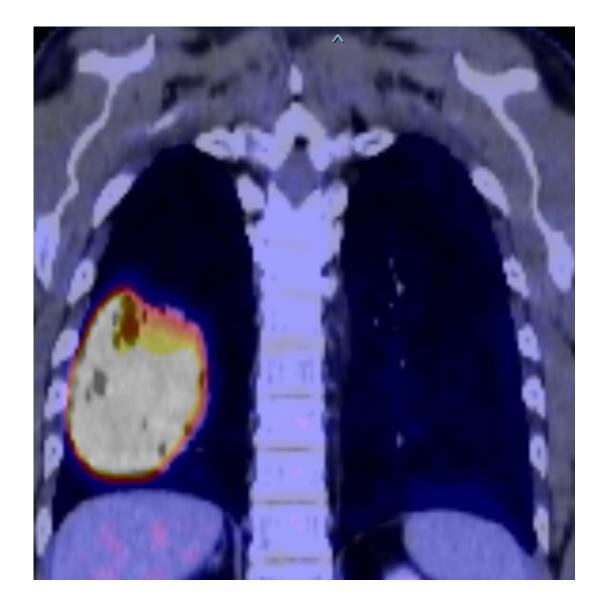


Scientist Comments:

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.

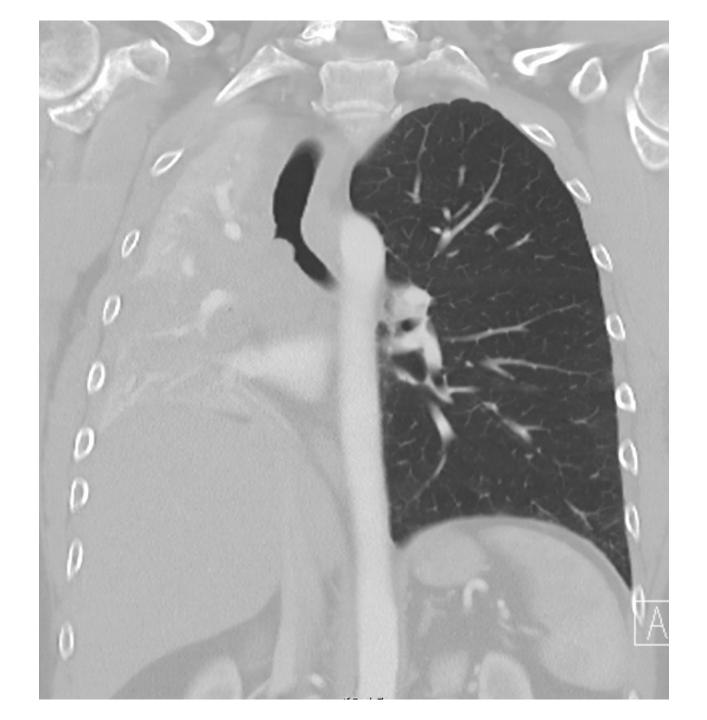






SUPPLEMENTARY REPORT

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.

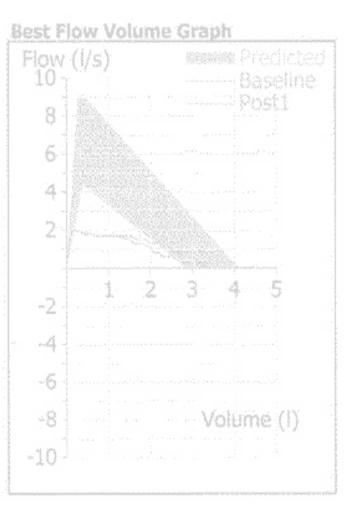


57F referred with progressive SOB

ID:		80036	0111839	4662						
Name: Age: 57 years 9 mc Height: 169 cm Gender: Female		57 years \$ 169 cm		We)B: sight: nnic Origin:	27/10/1962 85.3 kg Caucasian	Exam BMI: Factor		14/08 29.9 100	/20 2 0 10:54
Smoking	1	Non S	moker		sprioea:	0				
Medical	ion									
Please Not	er Spirome	try data an	d grapts a	re either best inc	dividual values or o	omposite curve				
Summar	y of All fe	orced te	sts							
	FEV1	FVC	PEF	FEV1/FV	C 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 Boy.			-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%	ia-			-		
	A75/ER5	Cineria (2005): 134	n vie prot						
Post1	1.75	3.68	121	48%	Golad Blow			-196	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 Slow			-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
FEVI	(1.71.1)	6296	-3,11	(1.76.1)	64%	396	-2.98	2.201	2.281	3.323	0.34
FVC	3.401	97%	-0.24	3.741	107%	10%	0.66	2.861	3.491	4.121	0.38
FEV1/FVC	(50%)	63%	-5.55	(47%)	619%	·6%	-6.22	69%	77%	85%	4.83
PEF	(1181/min).	29%	-3.62	(121 1/16)	29%	3%	-3.58	277 1/0980	411 l/min	545 Vinin	81.00
Lung Age	87 years				• • • • • • • • • • • • • • • • • • •						

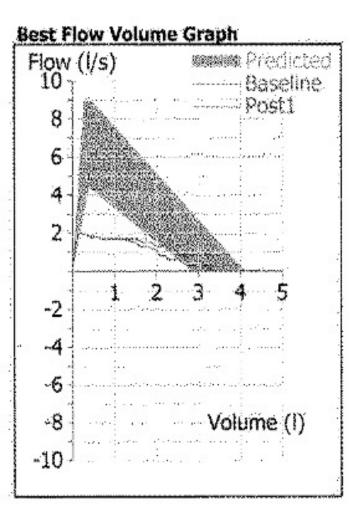


57F referred with progressive SOB

ID:		\$0036	01118394	4662					
Name: Age: Height: Gender: Smoking: Medication		57 years 9 months 169 cm Female Non Smoker		V E	OB: /eight: thnic Origin: yspnoea:	27/10/1962 85.3 kg Caucasian 0	Exam Date: 8MI; Factor:	14/08/2020 10:5 29.9 100	
lease Not	ter Sploome	try data an	id graphs an	e either best	ndividual values or co				
Summar	y of All fi	orced te	sts						
	FEV1	FVC	PEF	FEV1/F	VC Quality		VAR	Time	Date
Base	1.67	2.90	111	58%			-11%	10:56 A.	14/08/2020
Base	1.66	3.21	111	.52%	Good Boy		-5%	.10:56 A	14/08/2020
Base	1.67	3,40	114	49%			-196	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%	Sare -				
	%75/ER5	Cineria (2005): 1740	nie Met					
Post1	1.75	3.68	121	48%	Goad Blow		×196	11:16 A	14/08/2020
Post1	1.76	3.74	119	47%			.0%	11:18 A	14/08/2020
Post1	1.74	3.69	119	47%	Good Slow		-1%	11:19 A	14/08/2020
Post1+	1.76	3.74	121	47%					

Selected indices of the best blows

Index	Base	%Pred Zscr	Posti	%Pred	%Chg	Zscr	(Min	Pred	Max]	SD
FEVI	(1.71.1)	6296 -3.11	(1.76.))	64%		-2.96	2.201	2.261		0.34
FVC	3.401	97% -0.24	3.74-1	107%	10%	0.66	2,861	3.491	4.121	0.38
FEV1/FVC		85% -5.55								2.83
PEF	(118 1/min).	29% -3.62	(121 MB	2.9%	3%.	-3.58	277 i/iiyim	411 l/min	545 (/min	81.00
Lung Age	87.years									



Dear láin,

 Thank you for seeing Mrs
 aged 57 yrs , with worsening Shortness

 of breath
 .

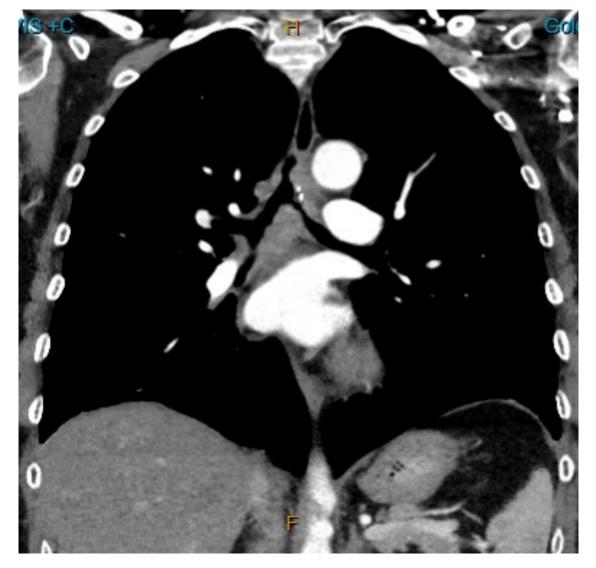
 She is travelling at the moment with her husband
 , one of your patients .

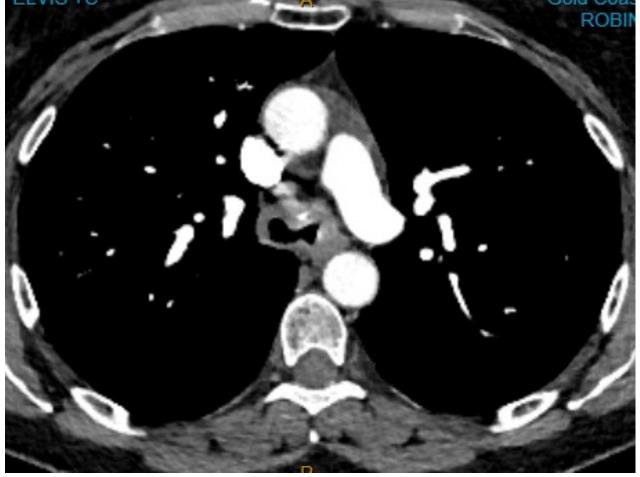
Her SOB only started in March and when she talks you can hear her gasp for air.

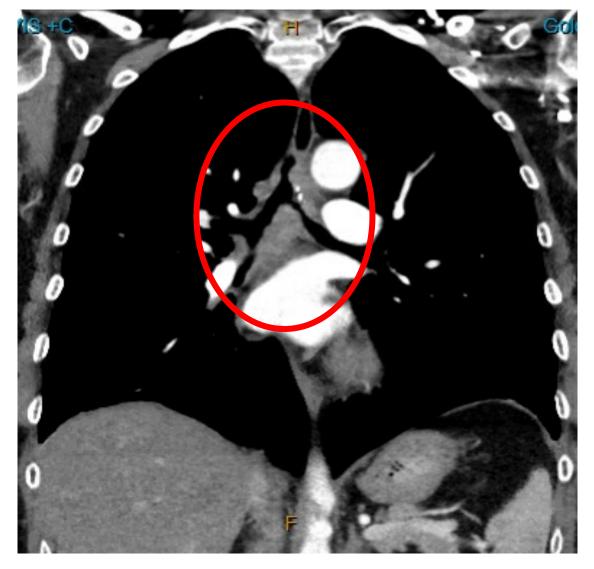
We organised a CT chest and pre/post spirometry after -ve COVID testing .

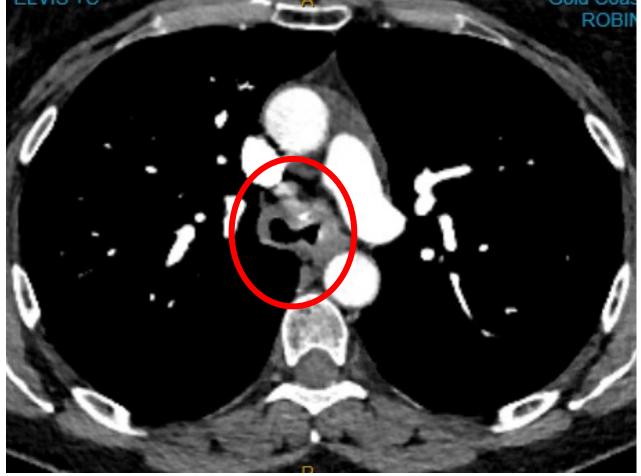
The Radiologist suspects tracheobronchopathia osteochondroplastica.

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





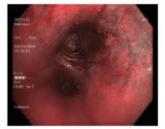




Add'l Images:



Tracheobronchial Tree



Left mainstem bronchus ; NBI distal left main bronchus



9 Trachea post cryobiopsy of small nodule



Trachea ; trachea prebiopsy



6 Left mainstern bronchus ;

Subglottic tracheal wall ; NBI proximal trachea

Trachea ; distal trachea

pre-Intervention

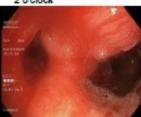
distal LMB



Bronchus intermedius with endobronchial disease extending into the RMB



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



Trachea ; main carina



Trachea ; exophytic, pedunculated nodule snared and retrieved



Trachea ; Post cryobiopsy and snare biopsy



8 Right mainstem bronchus ; RMB



12 Trachea ; trachea preblopsy



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10 Trachea ; exophytic, pedunculated nodule snared and retrieved

Add'I Images:



Tracheobronchial Tree



Left mainstem bronchus ; NBI distal left main



9 Trachea post cryoblopsy of small nodule



Trachea ; trachea preblopsy



6 Left mainstern bronchus ;

Subglottic tracheal wall ;

rchus 2 Bronchus Int

with endobronchial disease extending into the RMB



Right mainstem bronchus ; RMB - RUL al 2 o'clock



Trachea ; main carina



Trachea ; exophytic, pedunculated nodule snared and retrieved



Trachea ; Post cryoblopsy and snare blopsy



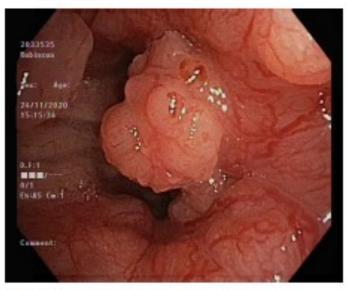
Right mainstem bronchus ; RMB



Trachea ; trachea preblopsy



13 Trachea ; trachea prebiopsy



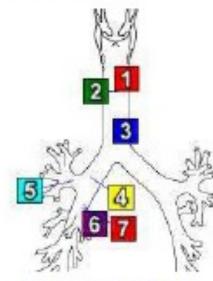
Trachea ; exophytic, pedunculated nodule snared and retrieved

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, featuing L and R main bronchus openings



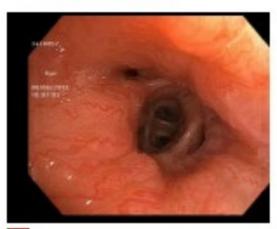
4 Right mainstem bronchus



Right upper lobe bronchus

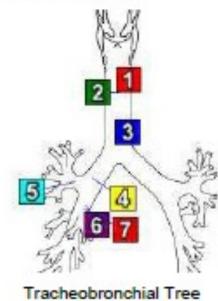


6 Bronchus intermedius

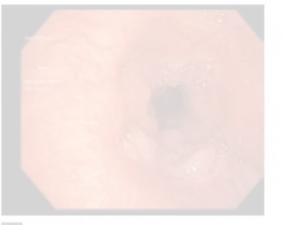


7 Bronchus intermedius with opening of RML and RLL bronchi

Add'l Images:



1 Trachea



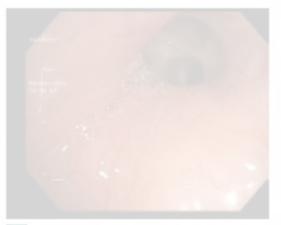
2 Trachea



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



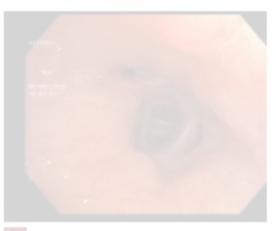
Right mainstem bronchus



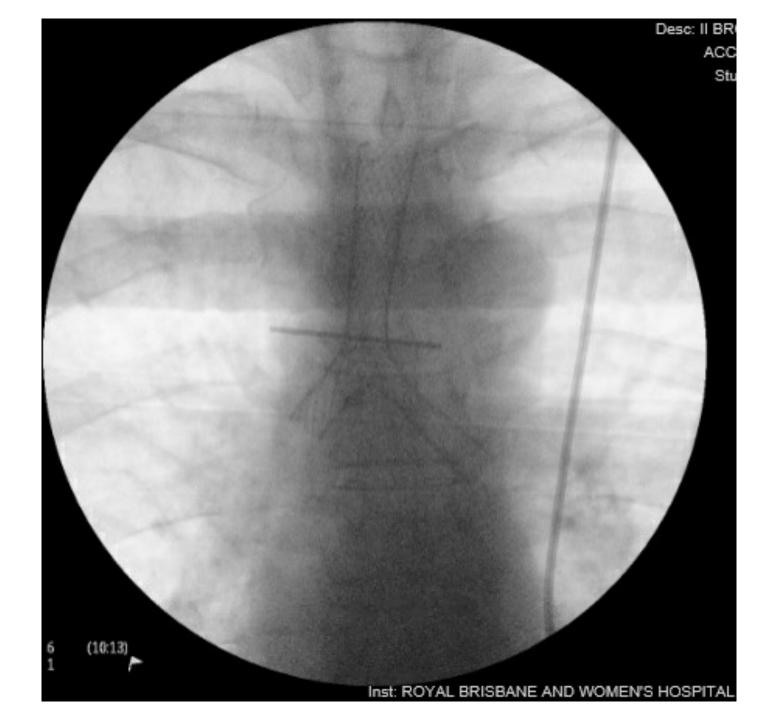
6 Right upper lobe bronchus



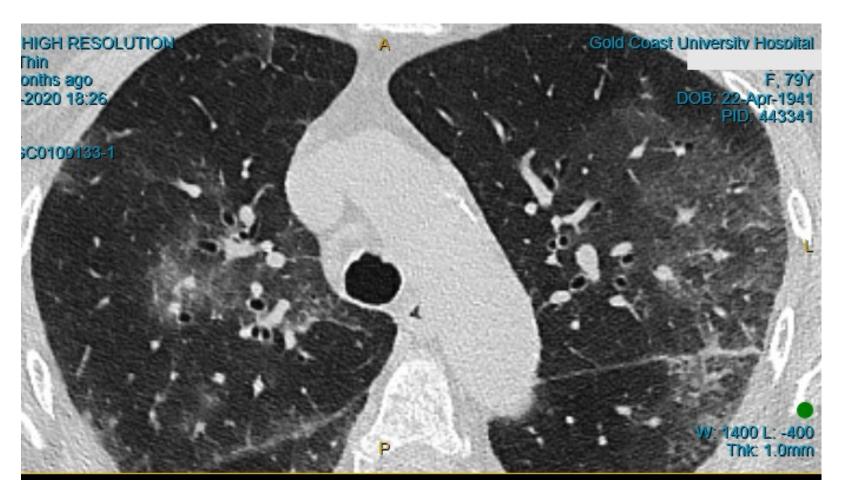
Bronchus intermedius

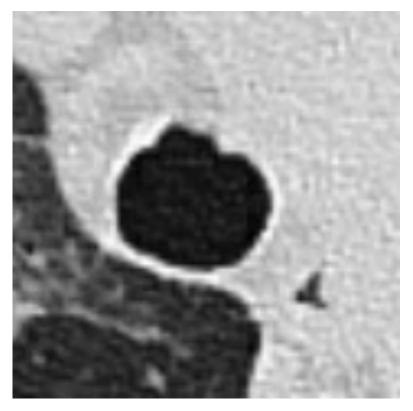


Bronchus intermedius with opening of RML and RLL bronchi

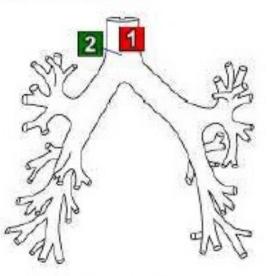


Tracheobronchopathica osteochondroplastica





Add'l Images:





Trachea

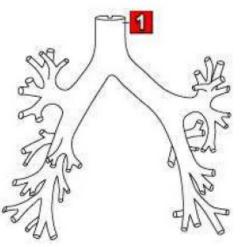
See: And See

2 Trachea

MICROSCOPIC

Tracheobronchial Tree

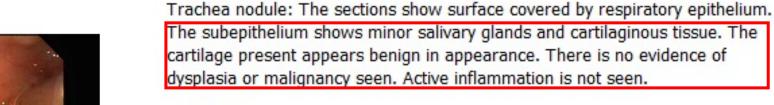
Add'l Images:





1 Trachea

Tracheobronchial Tree



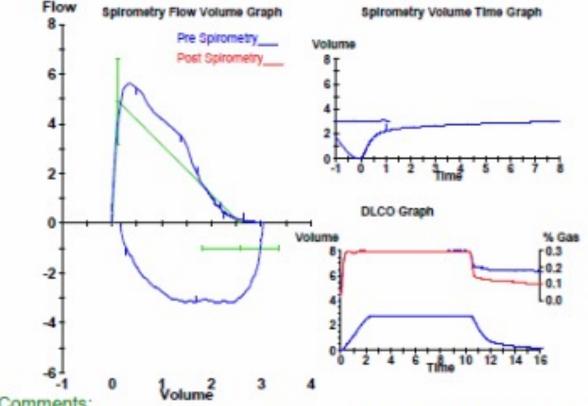
COMMENT

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



Red numbers in brackets () are outside the normal range

Flow Cal Date: 13/05/20 Software: SentrySulte Version 2.15 Barometric Pressure: 767mmHg DLCO Average BHT: 10.02Sec Spirometry FET: 10.10Sec FIVC: 2.87Liters

Reference Sets (Adults): GLI-Spirometry (PEF NHANE: Gutterrez-Lung Volumes Miller NonSmokens-DLCO Black & HyatI-MIPS+MEPS Uldry & Fitting-SNIP Reference Sets (Children): GLI-Spirometry (PEF NHAN) Zapietal «Byrs & Hibbert 8-18yrs-Lung Volumes GLI-DLCO Domenech Clar-MIPS+MEPS

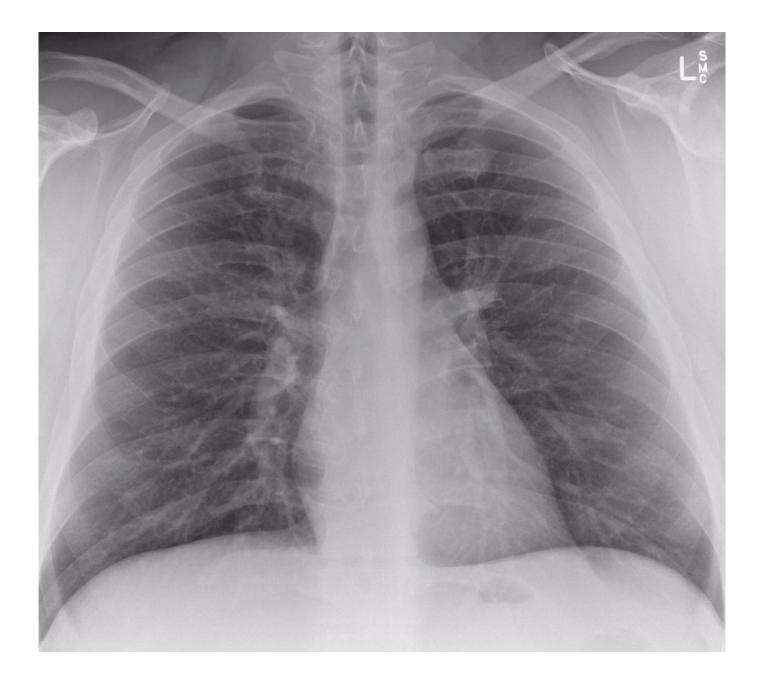
Comments:

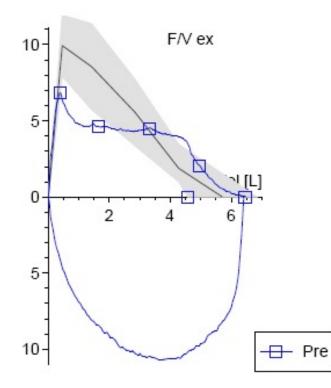
One acceptable FRC manoeuvre on static lung volumes measurements, all other results acceptable and repeatable. Spirometry performed in the sitting position. Haemoglobin value (g/dL) from blood test on 13/05/20. Note KCO (the transfer coefficient of the lung for carbon monoxide) is calculated from DLCO/VA.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

33M - previous VC surgery ? asthma

		Ref	Pred LL	Pred UL	Pre	%Ref	Post	%Ref	%Chg	7.0
Spirometry										-3 -2 Z-Score 2 3
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	71	87				
MFEF 75/25	L/s	4.57	2.78	6.81	4.06	89				
PEF	L/s	9.91	7.92	11.90	6.85	69				•
FEV 0.5 / FIV	/ 0.5				0.49					
FeNO	(ppb)									
Lung Volum										
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 Ca	apacity									
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.





Parameter	FEV1	FVC	TLC	DLCO_SFeNO
Date	(L)	(L)	(L)	(m
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.

Pre BD - Top Row / Date



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

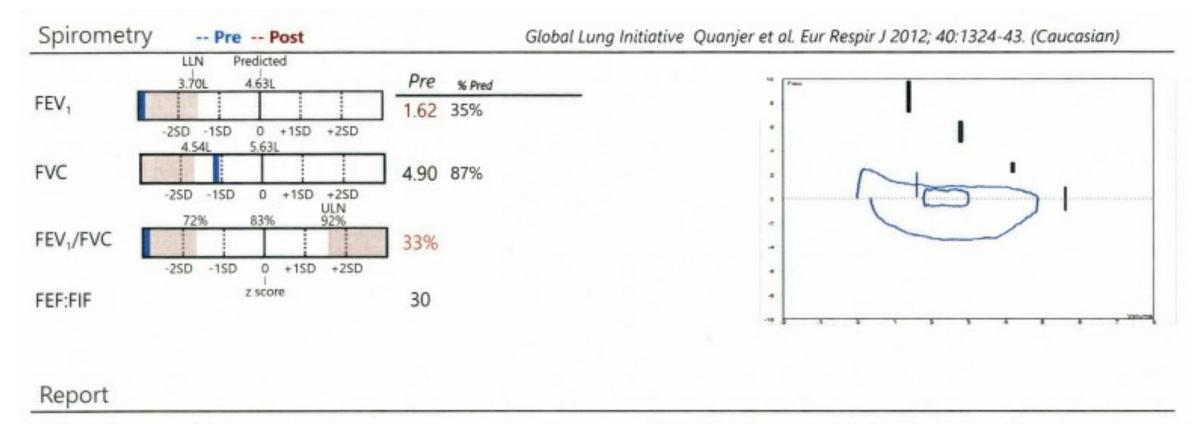
Sections of trachea show an ulcerated glomus tumour which measures 10 mm on the glass slide. There is no evidence of tumour necrosis, significant cytologic atypia, mitotic activity or atypical mitotic figures. Tumour tissue extends to the edge of the specimen.



29M – cough on b/g asthma

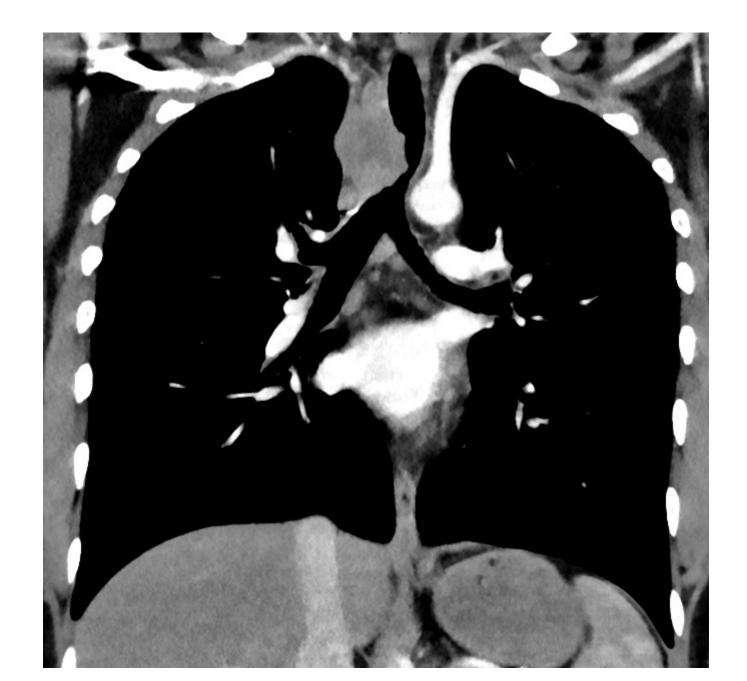


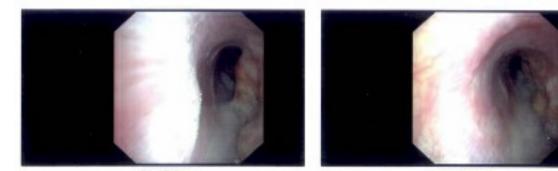
29M – cough on b/g asthma



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.





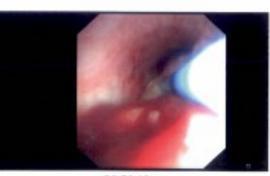


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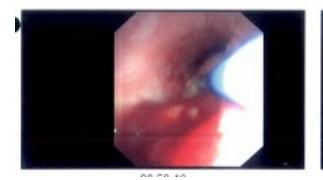
08:47:19

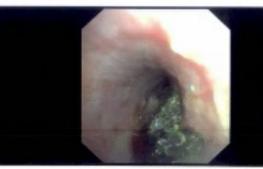


08:47:31



08:53:42



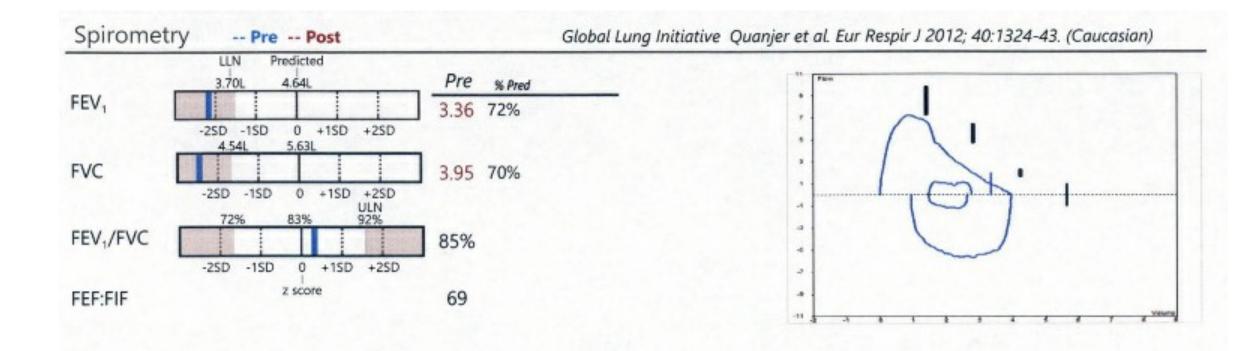




SUMMARY

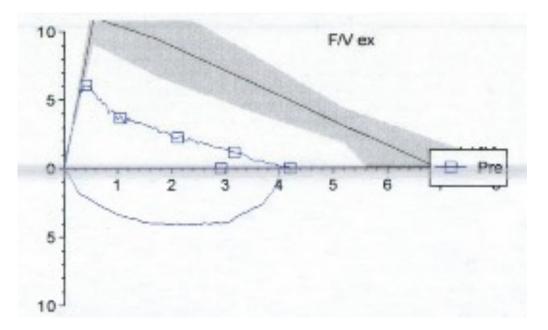
- 1. Endotracheal lesion biopsy: Classic Hodgkin lymphoma.
- 2. Peritracheal biopsy: No evidence of malignancy.
- 3. Anterior mediastinal mass: Classic Hodgkin lymphoma.
- 4. Soft tissue around carotid: No evidence of malignancy.
- 5. Tracheal lesion: No evidence of malignancy.
- 6. Tracheal lesion: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

Post debulking and chemoRx



22M – SOBOE, orthopnoea

L % Us Us L s L	24.09.21 2.91 4.21 69.28 6.06 2.24 4.17 4.21		24.09.21 5.73 6.93 83.66 11.05 6.27	24.09.21 4.64 5.61 72.10 9.06 4.09	51 % 61 % 83 % 55 % 36 %		
L % Us Us L	4.21 69.28 6.06 2.24 4.17 4.21		6.93 83.66 11.05 6.27	5.61 72.10 9.06	61 % 83 % 55 %		
% L/s L/s L	69.28 6.06 2.24 4.17 4.21		83.66 11.05 6.27	72.10 9.06	83 % 55 %		
L/s L/s L	6.06 2.24 4.17 4.21		11.05 6.27	9.06	55 %		
L/s L/s	2.24 4.17 4.21		6.27				
L	4.17 4.21			4.09	36 %		and the states
L	4.21		6.02				Statement Inc. and
			0.00				ENG I COM
			6.93	5.61	61 %		
	Pre	Post	Pred	Pred LL	Pred UL	Pre%Pred	-3Z2Score Pre
Hg)	22.9		41.8	34.8	48.7	55 %	
L			8.35		9.50		
g*L)	4.3		4.9	3.9	6.0	88 %	
)/dL	11.90						
Hg)	25.0		41.8	34.8			
g*L)	4.73		4.91	3.86	5.97	96 %	
L	5.84		8.50	7.35	9.65	69 %	
L							•
L	4.10		6.93	5.61	8.26	59 %	
F	/V ex	1	20	I value		+ FV	
5	6	Pre 1	90- 80- 70-				
		-	50				
	L g*L))/dL hHg) g*L) L L L % L F	L 5.28 g*L) 4.3)/dL 11.90)Hg) 25.0 g*L) 4.73 L 5.84 L 2.86 L 1.74 % 29.87 L 4.10 F/V ex	L 5.28 g*L) 4.3 h/dL 11.90 hHg) 25.0 g*L) 4.73 L 5.84 L 2.86 L 1.74 % 29.87 L 4.10 F/V ex	L 5.28 8.35 g*L) 4.3 4.9 h/dL 11.90 h/g) 25.0 41.8 g*L) 4.73 4.91 L 5.84 8.50 L 2.86 3.70 L 1.74 1.87 % 29.87 23.71 L 4.10 6.93 F/V ex [%] Predicted	L 5.28 8.35 7.20 g*L) 4.3 4.9 3.9)/dL 11.90 Hg) 25.0 41.8 34.8 g*L) 4.73 4.91 3.86 L 5.84 8.50 7.35 L 2.86 3.70 2.71 L 1.74 1.87 1.20 % 29.87 23.71 14.73 L 4.10 6.93 5.61 F/V ex [%] Predicted value 120 100 90 80 70 60 5 6 8 120 100 90 80 70 100 90 80 70 80 70 80 70 80 70 80 70 80 70 80 70 80 70 80 70 80 70 80 70 80 70 80 70 80 70 80 70 80 70 70 80 80 80 70 80 80 80 80 80 80 80 80 80 8	L 5.28 8.35 7.20 9.50 g*L) 4.3 4.9 3.9 6.0 http://dl 11.90 http://dl 11.90 http://dl 11.90 http://dl 11.90 http://dl 11.90 http://dl 11.8 34.8 48.7 g*L) 4.73 4.91 3.86 5.97 L 5.84 8.50 7.35 9.65 L 2.86 3.70 2.71 4.68 L 1.74 1.87 1.20 2.55 % 29.87 23.71 14.73 32.69 L 4.10 6.93 5.61 8.26 F/V ex [%] Predicted value 120 100 90 80 70 60 5 6 9 7 120 100 90 80 70 60 5 6 9 7 120 100 100 90 80 70 5 6 9 7 120 120 100 90 80 70 100 100 100 90 80 70 80 70 80 70 80 70 80 70 80 70 80 70 80 70 80 70 80 70 80 70 80 70 80 70 80 80 70 80 70 80 70 80 70 70 80 70 80 70 80 70 80 70 80 70 80 70 70 70 80 80 70 80 70 80 70 70 80 70 80 70 80 70 80 70 80 70 80 70 70 80 80 70 80 80 70 80 70 70 80 70 70 80 70 70 70 80 70 70 70 70 70 70 70 70 70 7	L 5.28 8.35 7.20 9.50 63 % g*L) 4.3 4.9 3.9 6.0 88 % http://dL 11.90 11.90 11.8 34.8 48.7 60 % g*L) 4.73 4.91 3.86 5.97 96 % L 5.84 8.50 7.35 9.65 69 % L 2.86 3.70 2.71 4.68 77 % L 1.74 1.87 1.20 2.55 93 % % 29.87 23.71 14.73 32.69 126 % L 4.10 6.93 5.61 8.26 59 % F/V ex [%] Predicted value F F 90 80 70 80 70 80 70 60 80 70 80 80 70 80 80 70 90 80 70 80 80 70 80 80 70 80 70 90 80 70 80 80 70







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



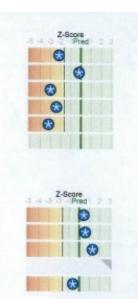
MICROSCOPY

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

SUMMARY Pericardial fluid: No malignant cells found.

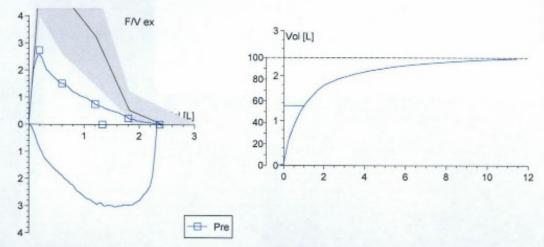
Visit date FEV 1 L FVC L FEV 1 % VC MAX %	22.10.21 3.06 4.37		22.10.21	22.10.21			1981 N		
FVC L			8.70						
	4.37		5.73	4.64	53 %		1838 · 1988		
EEVAN VC MAY			6.93	5.61	63 %		1888 C 1 8888		
EV 1 70 VC MAA 70	69.91		83.63	72.08	84 %				
PEF L/s	6.12		11.05	9.06	55 %				
MEF 50 L/s	2.46		6.27	4.09	39 %				
PIF L/s	3.78						1980 I 1080		
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 %	1 10 M		
VA SB L	5.14		8.35	7.20	9.50	62 %	1000 C 1000		
KCO_SB ml/(min*mmHg*L)	3.6		4.9	3.9	6.0	74 %			
Hb g(Hb)/dL	10.90						100 C 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
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 %	10 · 1 · 10 000		
TLC L	5.98		8.50	7.35	9.65	70 %	1000		
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 %	100 I		
VC L	4.26		6.93	5.61	8.26	61 %			
10 5	1	[%] Predicted value FEV1 L FVC L DLCO_S mil/min*mm DLCOcS mil/min*mm 100							

	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 G	LI 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		





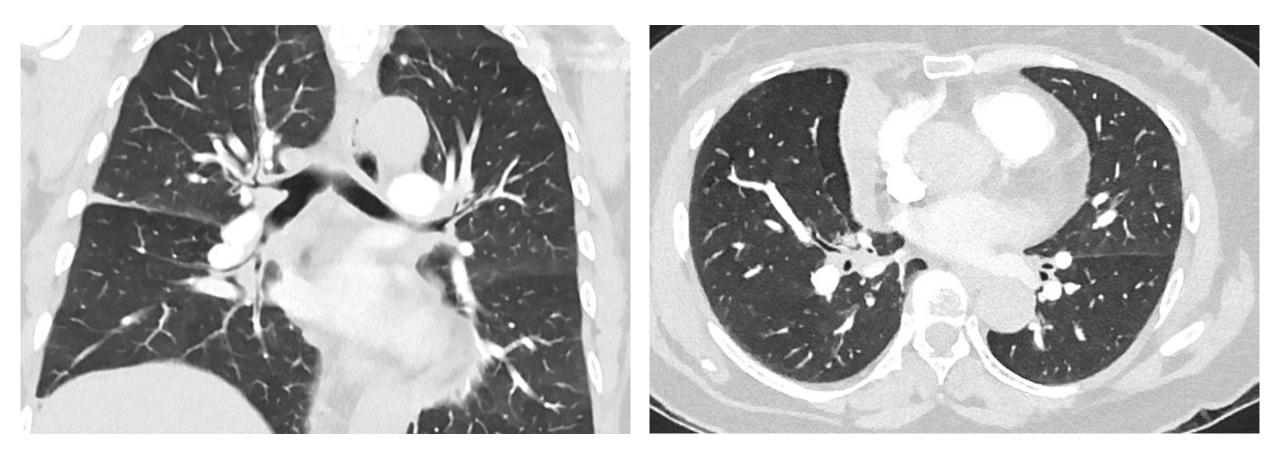
Hemocue Hb, otherwise assumes: 13.4g/dL females and 14.6g/dL males if no Hb.

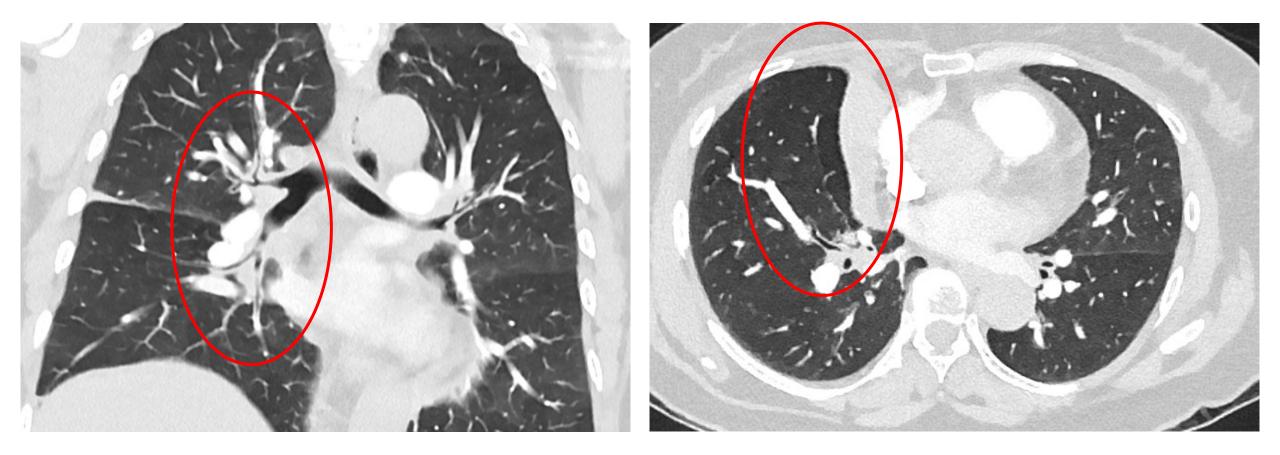


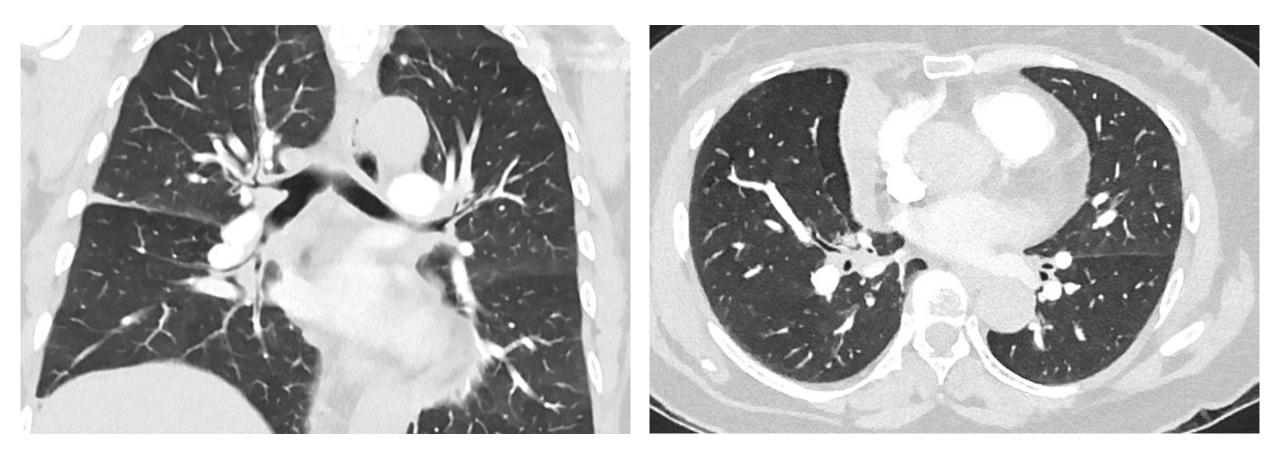
Technical Comments:

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

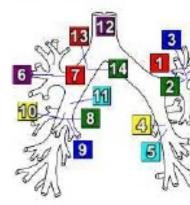








Add'l Images:





1 Left upper lobe



2 Left upper lobe



3 Left upper lobe ; LB1/2

Tracheobronchial Tree



Left lower lobe



8 Right middle lobe



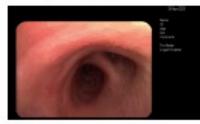
12 Trachea



Left lower lobe ; LLL



9 Right middle lobe



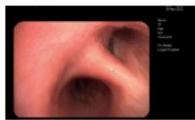
13 Right mainstem bronchus



6 Right upper lobe



00 Right middle lobe



14 Right mainstem bronchus ; RMB



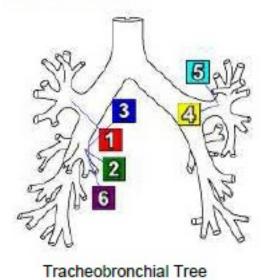


II Bronchus intermedius





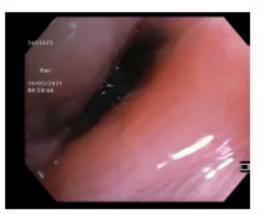






1 Right upper lobe ; RUL

- SAGARES Rain REASESTREE REASESTREE
- 2 Right middle lobe ; RML



3 Right middle lobe ; RML



4 Left upper lobe ; LUL



Left upper lobe ; LB1+2 & 3



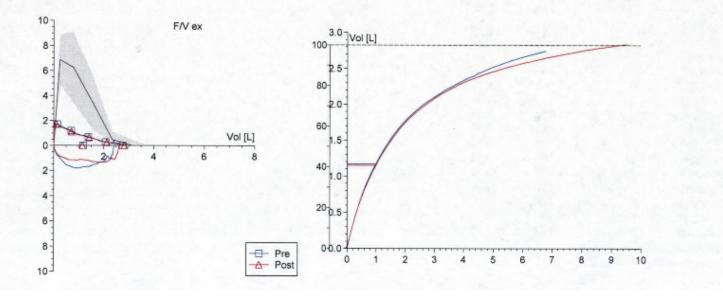
6 Right middle lobe ; RML

77M GP referred with calcified adenopathy ? TB

		Pred	Pred LL	Pred UL	Pre	%Pred	Post	%Pred	%Chg	Z-Score
Spirometry -Quanjer GL	1 2012-									-5 -4 -3 -2 -1Pred1 -2 -3
FEV 1	L	2.36	1.87	2.82	1.17	50	1.15	49	-2	3
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	3
PEF	L/s	6.86	4.87	8.85	1.70	25	1.72	25	1	8
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	5.4.3	Z-Score	
2012-									0		ALC: NO
L	2.36	1.87	2.82	1.17	50	1.15	49	-2	•		
L	3.14	2.58	3.70	2.75	88	2.83	90	3		3	1624
L	3.14	2.58	3.70	2.75	88	2.83	90	3		3	
%	76	64	87	43	56	41	54	-5	3		
L/s	6.86	4.87	8.85	1.70	25		25	1	•	1	111
				0.76		1.02		34			
				20							
		L 2.36 L 3.14 L 3.14 % 76	L 2.36 1.87 L 3.14 2.58 L 3.14 2.58 K 3.14 2.58 % 76 64	L 2.36 1.87 2.82 L 3.14 2.58 3.70 L 3.14 2.58 3.70 % 76 64 87	2012- 2.36 1.87 2.82 1.17 L 3.14 2.58 3.70 2.75 L 3.14 2.58 3.70 2.75 % 76 64 87 43 L/s 6.86 4.87 8.85 1.70 0.76 0.76 0.76 0.76	2012- L 2.36 1.87 2.82 1.17 50 L 3.14 2.58 3.70 2.75 88 L 3.14 2.58 3.70 2.75 88 % 76 64 87 43 56 L/s 6.86 4.87 8.85 1.70 25 0.76 0.76 0.76 0.76 0.76	2012- L 2.36 1.87 2.82 1.17 50 1.15 L 3.14 2.58 3.70 2.75 88 2.83 L 3.14 2.58 3.70 2.75 88 2.83 % 76 64 87 43 56 41 L/s 6.86 4.87 8.85 1.70 25 1.72 0.76 1.02	2012- L 2.36 1.87 2.82 1.17 50 1.15 49 L 3.14 2.58 3.70 2.75 88 2.83 90 L 3.14 2.58 3.70 2.75 88 2.83 90 M 76 64 87 43 56 41 54 L/s 6.86 4.87 8.85 1.70 25 1.72 25 0.76 1.02 1.02 1.02 1.02 1.02	2012- L 2.36 1.87 2.82 1.17 50 1.15 49 -2 L 3.14 2.58 3.70 2.75 88 2.83 90 3 L 3.14 2.58 3.70 2.75 88 2.83 90 3 M 76 64 87 43 56 41 54 -5 L/s 6.86 4.87 8.85 1.70 25 1.72 25 1 0.76 1.02 34	2012- L 2.36 1.87 2.82 1.17 50 1.15 49 -2 L 3.14 2.58 3.70 2.75 88 2.83 90 3 L 3.14 2.58 3.70 2.75 88 2.83 90 3 % 76 64 87 43 56 41 54 -5 ⊗ L/s 6.86 4.87 8.85 1.70 25 1.72 25 1 ⊗ 0.76 1.02 34	2012- L 2.36 1.87 2.82 1.17 50 1.15 49 -2 L 3.14 2.58 3.70 2.75 88 2.83 90 3 L 3.14 2.58 3.70 2.75 88 2.83 90 3 % 76 64 87 43 56 41 54 -5 3 L/s 6.86 4.87 8.85 1.70 25 1.72 25 1 3 0.76 1.02 34

Measurement device





Broncholiths ?



Progressive Anthracofibrosis... Again

		Pred	Pred LL	Pred UL	Pre	%Pred	Post	%Pred	%Chg	Z-Score
Spirometry -Quanjer GLI		0.00	4.07	0.00						8
FEV 1 FVC	-	2.36	1.87	2.82	1.17	50	1.15	49	-2	
VCEX	L	3.14	2.58	3.70	2.75	88	2.83	90	3	õ
FEV 1 % FVC	L	3.14	2.58	3.70	2.75	88	2.83	90	3	
PEF	% L/s	76 6.86	64 4.87	87	43	56	41	54	-5	8
FEV 0.5 / FIV 0.5	L/S	0.00	4.07	8.85	<u>1.70</u> 0.76	25	<u>1.72</u> 1.02	25	1 34	8
FeNO (ppb) Measurement device					20					
10		F/V ex			3.0 Vol [L]					
8-				100	2.5-			/		
4				80-	2.0-	/				
2			Vol [L]	60-		/				
0 20	4	6	8	40-	1.5-	/				
2					1.0-					
6				20-	0.5					
8			_							
•				Pre 04 Post	0 1	2 3	4 5	6 7	8 9	10

Add'l Images:

.





- -

1 Trachea + EDAC



2 Right upper lobe pre procedure



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



Left upper lobe pre procedure



8 post procedure





Left upper lobe pre procedure



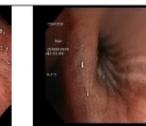
9 Left upper lobe post procedure



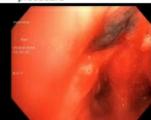
6 Left lower lobe pre procedure



Left upper lobe post procedure



7 Left lower lobepre procedure



Bronchus intermedius post procedure

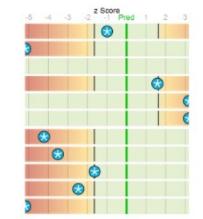
THE END

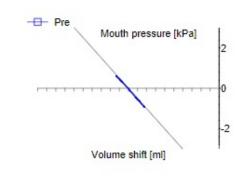


		Pred LL	Pred UL	Pre	%Pred
	Quanjer GLI 2012-	0.05	0.45	4.40	20
FEV 1	L	2.25	3.45	1.12	39
FVC	L	2.80	4.34	1.13	32
VC MAX	L	2.80	4.34	1.14	32
FEV 1 % FVC		70	90	99	122
PEF	L/s	5.15	8.60	3.27	48
FEV 0.5 / FIV				1.15	
	ppb) es -Hall GLI 2020-				
TLC		4.01	5.98	4.39	88
	L				
VC	L	2.80	4.34	<u>1.14</u> 0.90	32
IC	L	2.21	2.21		41
FRCpleth	L	1.88	3.53	3.50	129
RV	L	1.13	2.28	3.26	191
RV % TLC	%	25	45	<u>74</u>	212
-	pacity - Stanojevic				
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	
	47	F/V ex			
	一個	F/V ex		37V0	1 [1]
)		-	
	2-		1	-	
	1		1	2-	
8/8		Vol [L]		1	
0023#H796	0			100	
8	1	1 2		60 /	
	1	/		40	
	4 \				
	2-			203 of.	
	2-			$ \begin{array}{c} 100 \\ 80 \\ 60 \\ 40 \\ 20 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ $	1

- Pre







Knee

		Pred	Pred LL	Pred UL	Pre	%Pred	Post	%Post	%Chg	z-Soore
Spirometry	-Quanjer GLI 2012-									-5 -4 -3 -2 Pred 1 2 3
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	C %	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)									Internet Press
Lung Volum										z Score
TLC	L	6.76	5.40	8.13	5.27	78				Pred 1
VC	L	4.65	3.71	5.62	3.86	83				
IC	L	3.38	2.37	4.34	3.04	90				8
FRCpleth	L	3.44	2.38	4.77	2.24	65				Ø
RV	L	2.17	1.33	3.17	1.41	65				
RV % TLC	%	32	22	42	27	85				
Diffusing Ca	apacity - Stanojevic	GLI 2020-								
DLCO_SB	ml/(min*mmHg)	25.6	19.1	33.3	18.5	72				0
DLCOcSB	ml/(min*mmHg)	25.6	19.1	33.3	19.0	74				0
KCOc_SB	ml/(min*mmHg*L)	4.2	3.2	5.4	4.0	95				i d
VA_SB	L	6.09	4.92	7.35	4.72	77				
IVC	L	4.65	3.71	5.62	3.53	76				0
НЬ	g(Hb)/dL				13.80					
Pressure	mmHg				764		750			

