

Cas Cliniques Pneumo



H.Neveu Hôpital Foch Suresnes

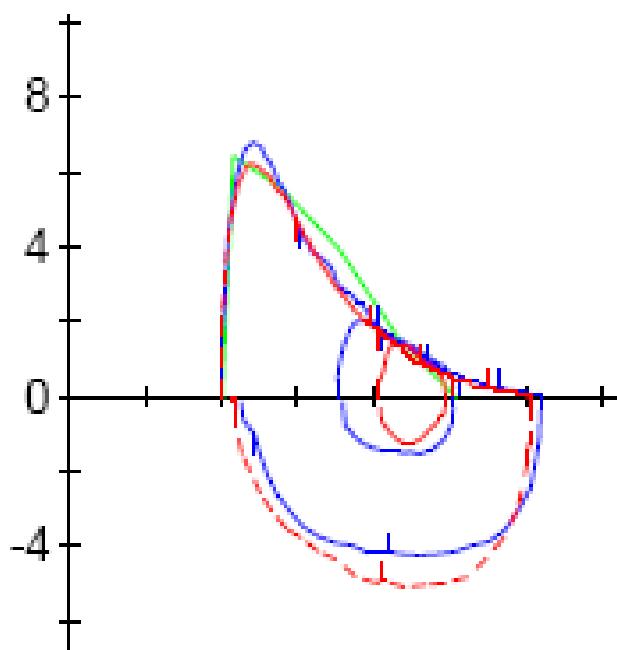
Je déclare ne pas avoir de conflit d'intérêt

Madame P.

La BPCO ne se résume pas au VEMS...

- 54 ans
- Tabagisme à 1 paquet/jour non sevré (35 PA)
- Goître multinodulaire traité par Levothyrox.
- Syndrome de Gougerot Sjögren : polyarthralgies + syndrome sec oculaire et buccal + FAN à 1/320
- Dyspnée à 300 mètres

EFR



VEMS 2.73 litres (103 %)

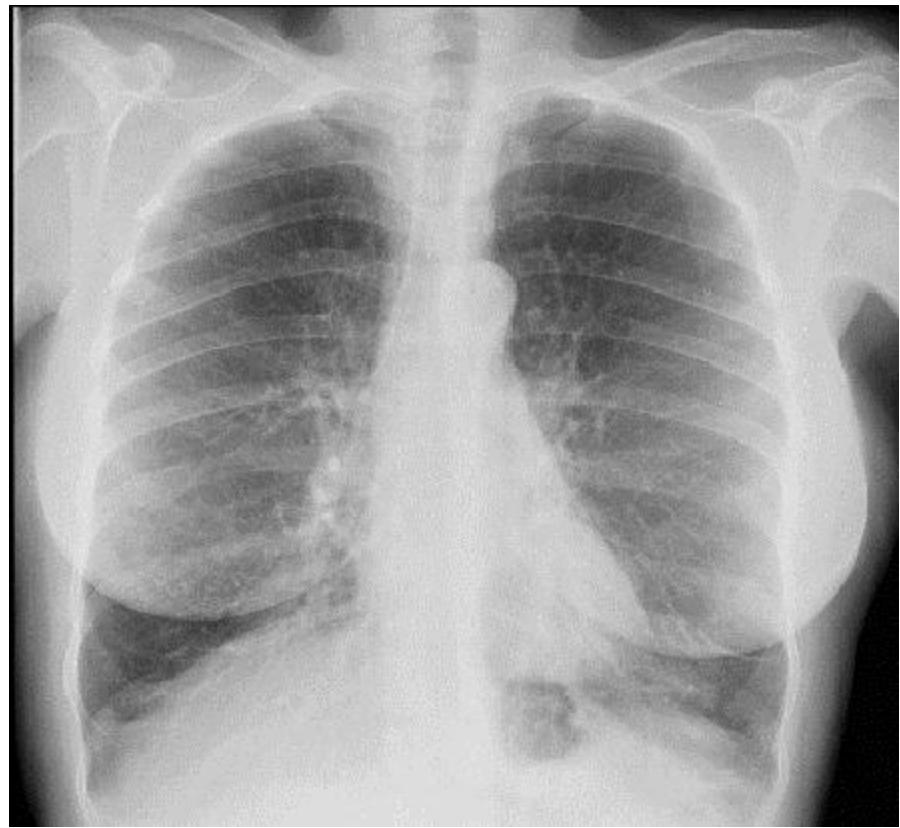
CVL 4.28 litres (134%)

VEMS/CVL 64% (80% T)

CPT 6.92 litres (136 %)

VR 2.68 litres (149%)

$P_{O_2} = 66$ $PCo_2 = 32$ $pH = 7.48$ $HbCO = 8\%$



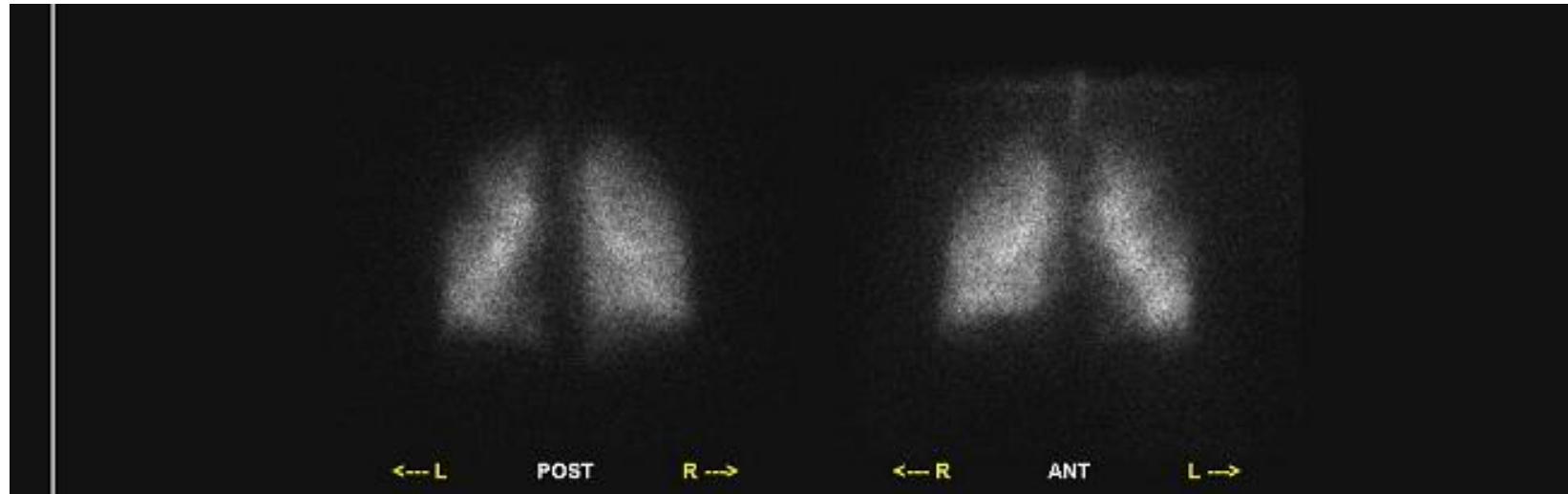
VO₂

| | Pic VO ₂ | Dyspnée ++ |
|-----------------------------------|---------------------|------------------------|
| Puissance | 67 Watts | |
| VO ₂ | 1068 ml/min | |
| VO ₂ /kg | 15,3 ml/min/kg | 67% Théo normes Hansen |
| VO ₂ /VCO ₂ | 1,18 | |
| Lactates | 5,9 mmol/l | |
| Ventilation | 57 litres | |
| Volume courant | 1629 ml | |
| FR | 35/min | |
| VE/VO ₂ | 53 | |
| VE/VCO ₂ | 45 | |
| Réserve ventilatoire | 40% | |
| FC | 149/min | 84% de la FMT |
| Pouls d'O ₂ | 7,2ml/batt/min | |
| Saturation | 87 % | |

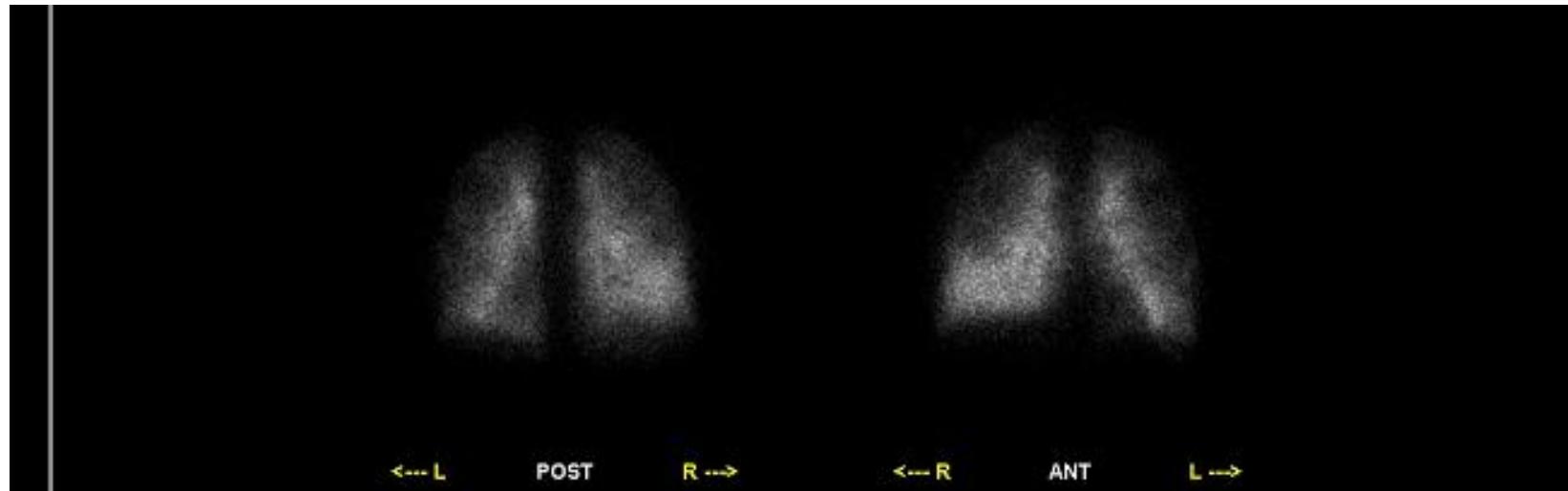
VO₂

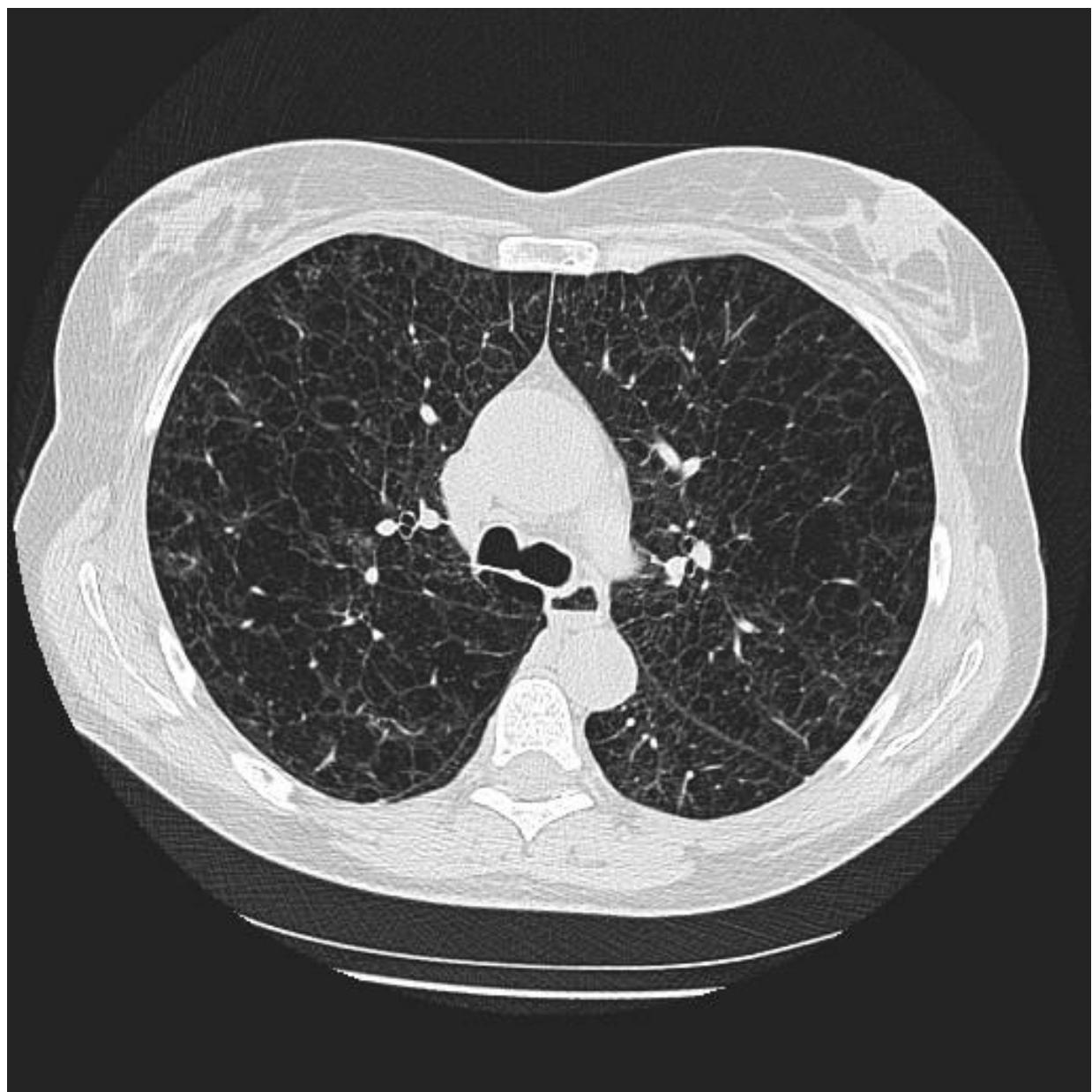
| | Repos | 67 Watts |
|----------------------|--------------|-----------------|
| PO ₂ | 66 | 54 |
| PCO ₂ | 38 | 37 |
| Ph | 7,46 | 7,39 |
| D(A-a)O ₂ | 36 | 61 |
| Vd/Vt (gazométrie) | 0,52 | 0,44 |
| Vd | | 720 ml |

Ventilation



Perfusion





Classification GOLD de la BPCO

Selon GOLD il y a 5 stades dans la BPCO:

| Stade | Caractéristiques |
|---------------------|--|
| 0: à risque | Spirométrie Normale Symptômes Chroniques (toux, expectoration) |
| 1: BPCO débutante | FEV1/FVC < 70% FEV1 > ou égale à 80% des valeurs prédictives Avec ou sans symptômes chroniques (toux, expectoration) |
| 2: BPCO modérée | FEV1/FVC < 70% FEV1 entre 50% et 80% des valeurs prédictives Avec ou sans symptômes chroniques (toux, expectoration) |
| 3: BPCO sévère | FEV1/FVC < 70% FEV1 entre 30% et 50% des valeurs prédictives Avec ou sans symptômes chroniques (toux, expectoration) |
| 4: BPCO très sévère | FEV1/FVC < 70% FEV1 < 30% des valeurs prédictives ou FEV1 < 50% des valeurs prédictives et insuffisance respiratoire |

!!

DLCO : 20% T

Test de marche AA

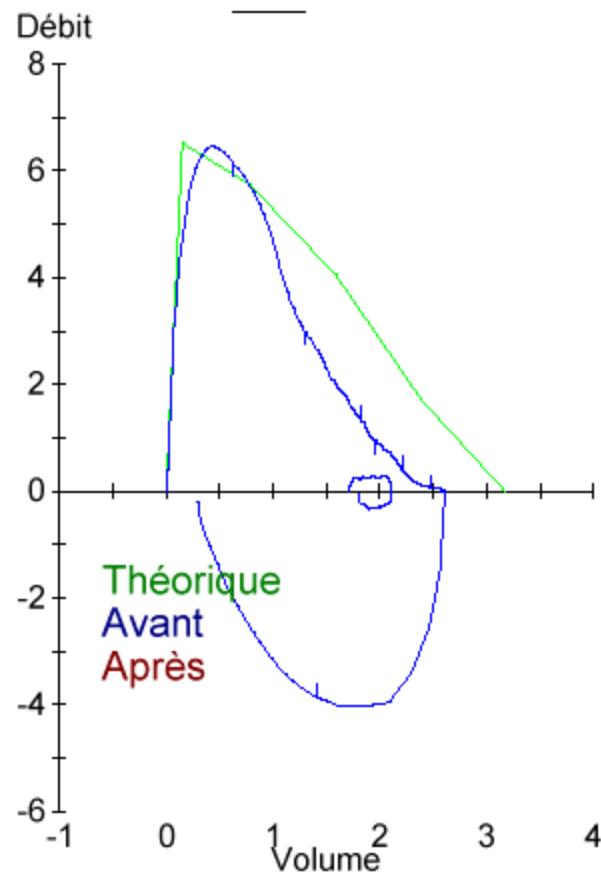
- 477 mètres en 6 minutes
- Saturation : 92 % -> 75%; FC : 94 /min -> 150 /min

Dyspnée « psy »

Mme B.

- 44 ans
- Tabac = 0
- 86 kgs 163 cm
- DE 1 étage
- Explorations pneumo / cardio : RAS

| | | Pré Mes. | Pré Théo |
|----------|--------|-------------|-------------|
| CVF | Litres | 2.62 | 82 |
| VEMS | Litres | 2.22 | 81 |
| VEMS/CVF | L/min | 85 | 105 |
| VEMS/CVL | L/min | | |
| DEM25/75 | L/sec | 2.58 | 75 |

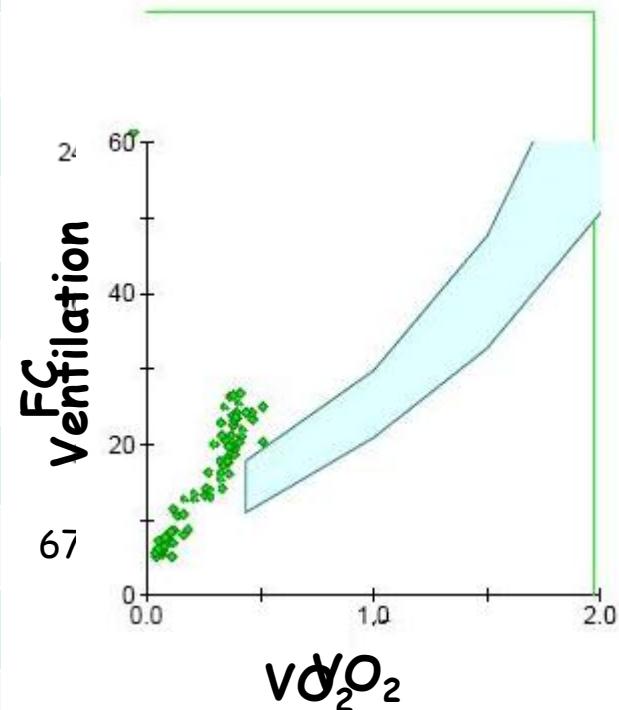


VO₂ de Mme B.

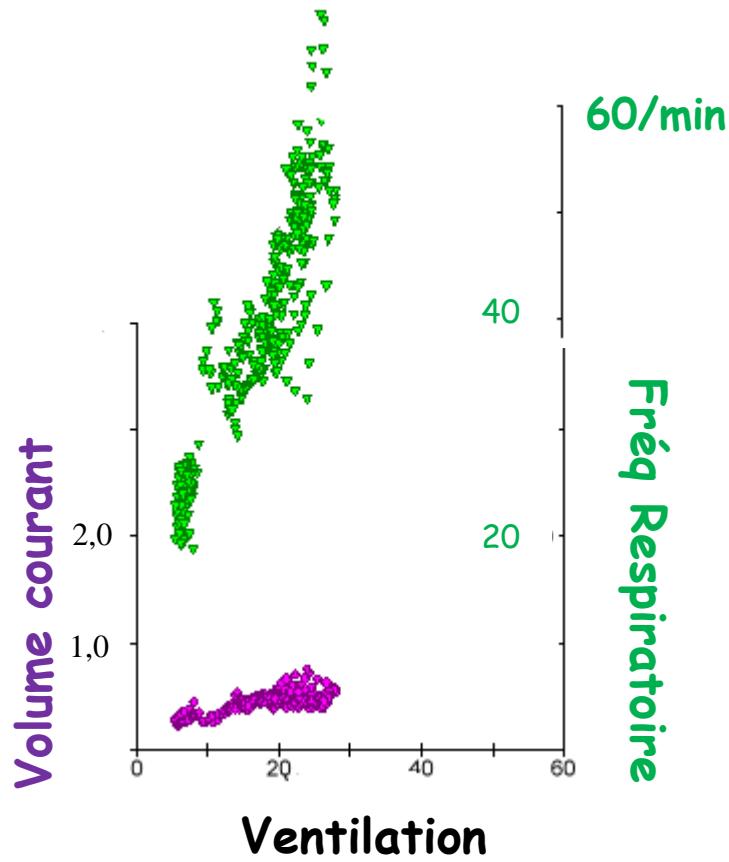
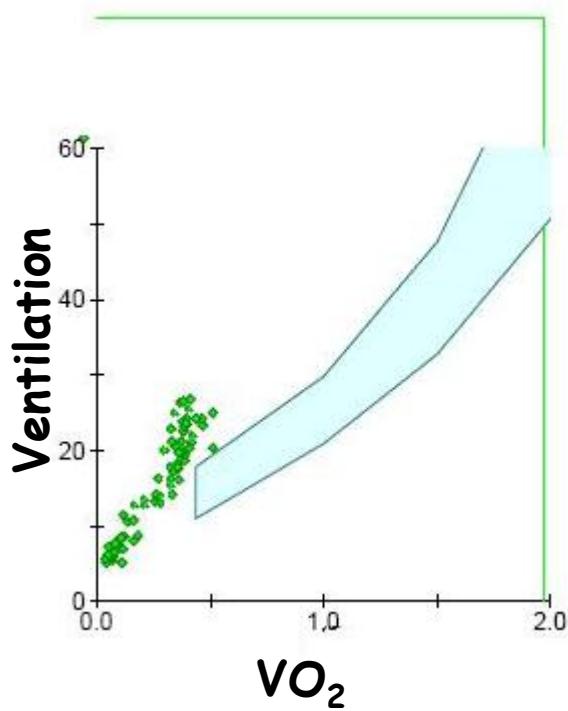
| | Repos | Pic VO ₂ |
|---------------------------------------|-------|---------------------|
| Puissance | | 40 Watts |
| VO ₂ | | 614 ml/min |
| R(VO ₂ /VCO ₂) | | 1 |
| Ventilation | | 29 litres |
| Volume courant | | 536 ml 51/min |
| FR | | |
| VE/VO ₂ | | 47 |
| VE/VCO ₂ | | 47 |
| Réserve ventilatoire | | 63% |
| FC | | 122/min |
| PO ₂ | 84 | 99 |
| PCO ₂ | 35 | 34 |
| D(A-a)O ₂ | 23 | 16 |
| Vd/Vt (gazométrie) | | 0,39 |

Dyspnée ++

Soit 7 ml/kg/min (32 %)

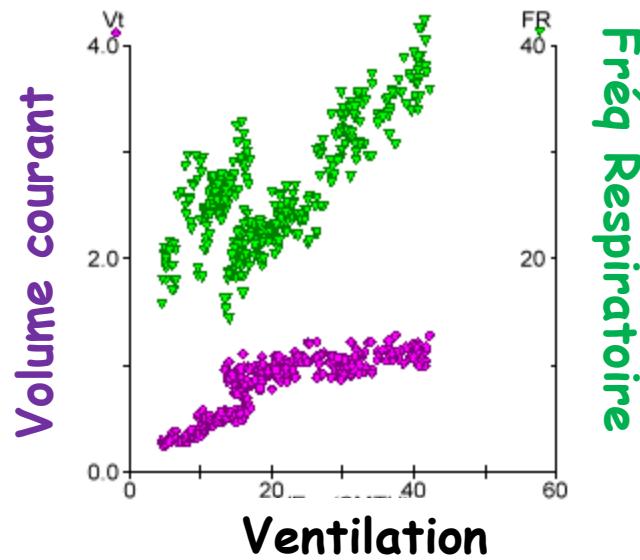
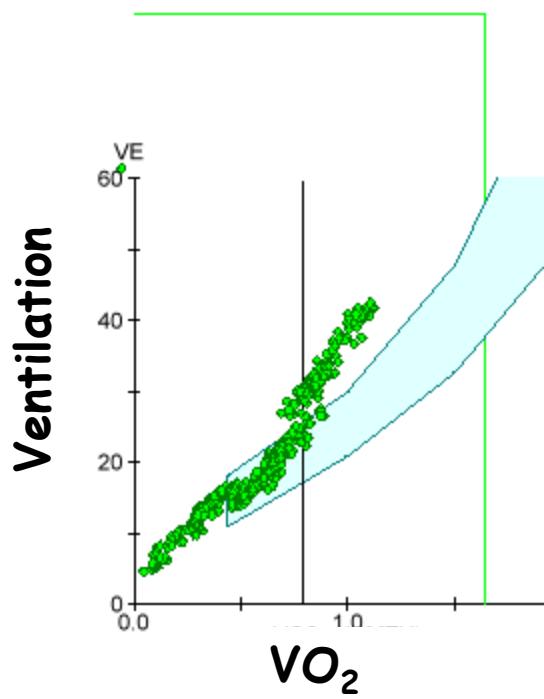


VO₂ de Mme B.



VO₂ de Mme B. après kiné

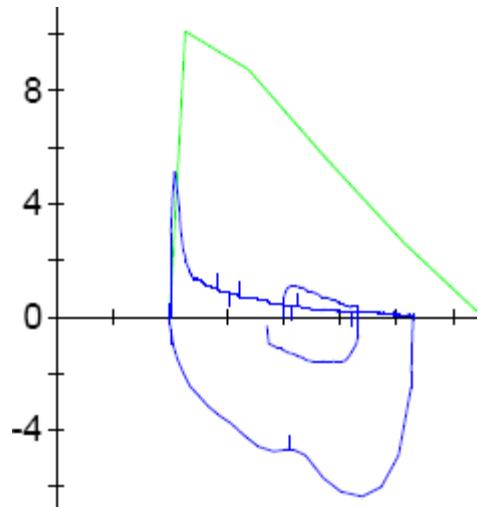
- Puissance : 40 à 92 Watts



Le poumon écrase le cœur ?

Mr C.

- Bilan d'un Emphysème sur déficit en alpha 1 AT. Tabagisme à 2 cigarettes/jour
- Dyspnée à 3 étages.



VEMS = 1,29 (29% T)

CVF = 4,29 (77%)

VEMS/CVF = 30

VO₂ de Mr C.

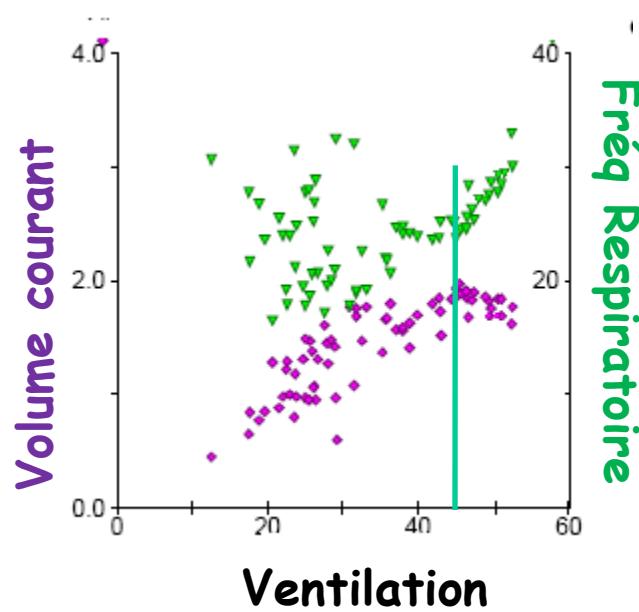
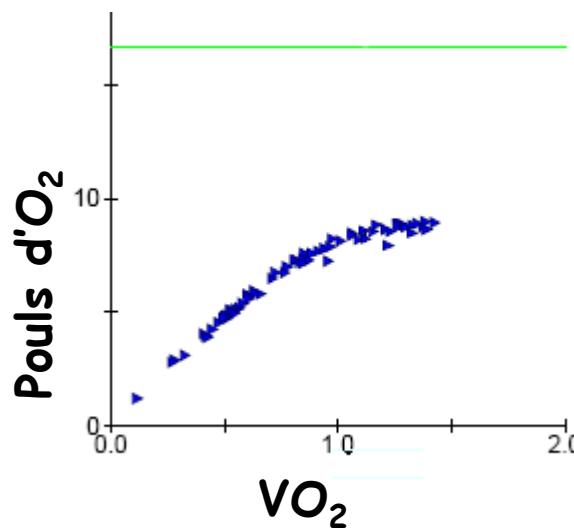
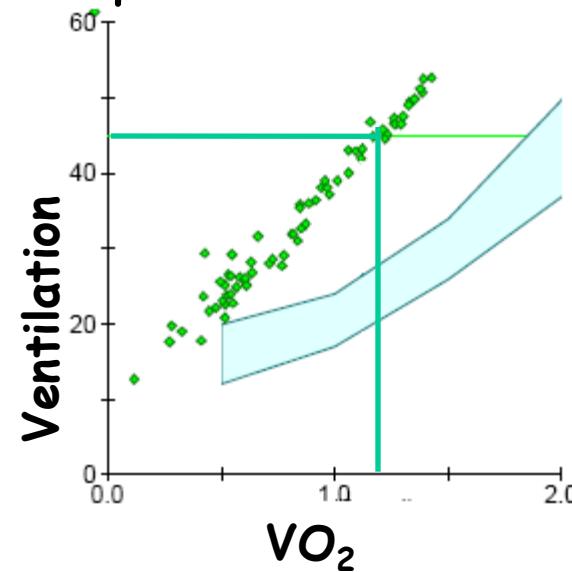
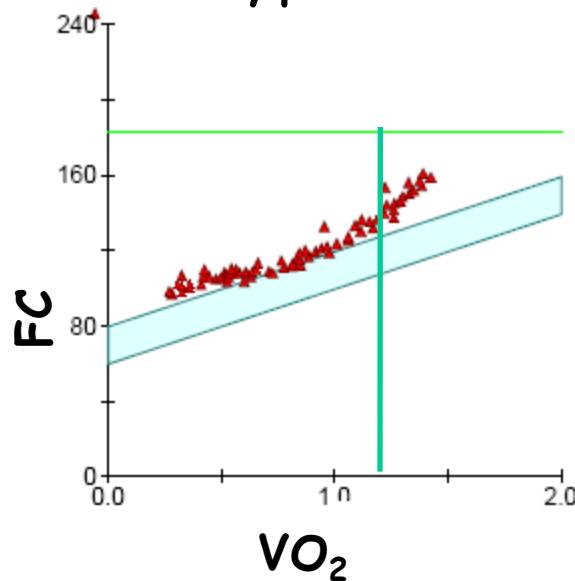
| | | Pic VO ₂ |
|---------------------------------------|------|---------------------|
| Puissance | 70 | 103 Watts |
| VO ₂ | 956 | 1426 ml/min |
| R(VO ₂ /VCO ₂) | 0,99 | 1,05 |
| Ventilation | 39 | 53 litres |
| Volume courant | 1339 | 1763 ml |
| FR | 30 | 30/min |
| VE/VO ₂ | 41 | 37 |
| VE/VCO ₂ | 42 | 35 |
| Réserve ventilatoire | | -17 % |
| FC | 133 | 160/min |
| PO ₂ | 71 | 64 |
| PCO ₂ | 37 | 35 |
| D(A-a)O ₂ | 41 | 52 |
| Vd/Vt (gazométrie) | 0,37 | 0,25 |

Dyspnée ++
RV= 0
Ph =7,36 lactates 7,9

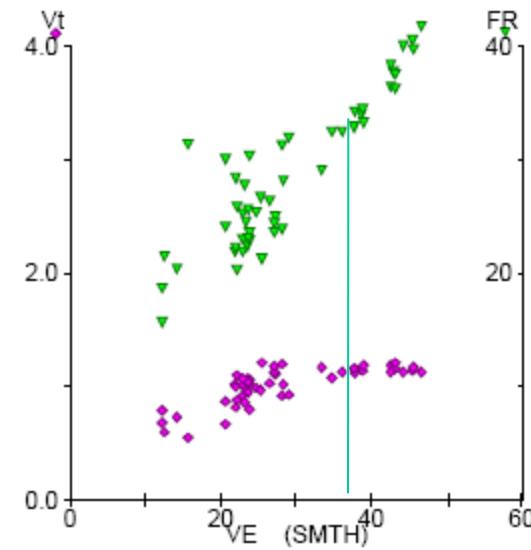
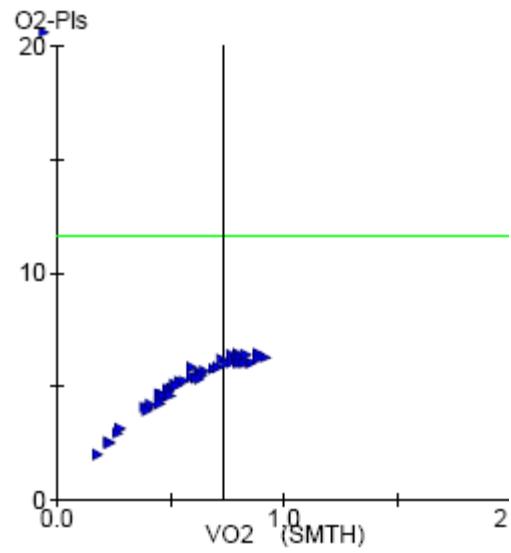
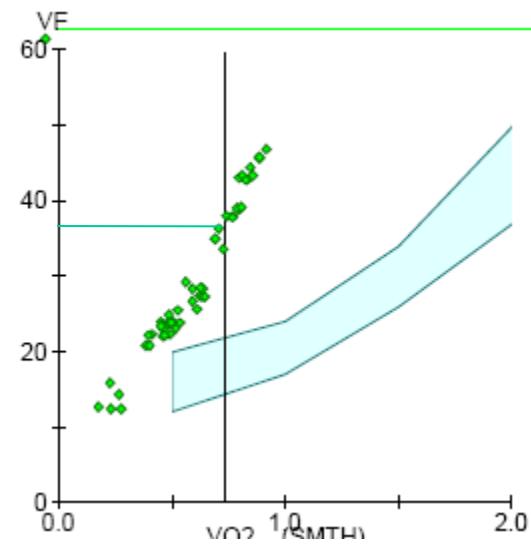
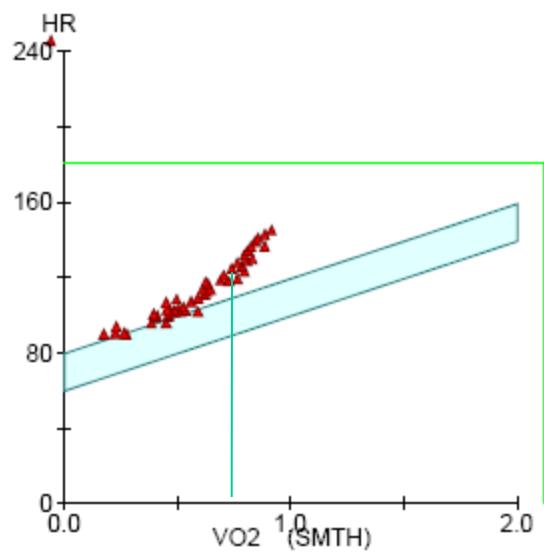
Soit 16,6 ml/kg/min (47 %)

87% de la FMT

Hyperinflation dynamique

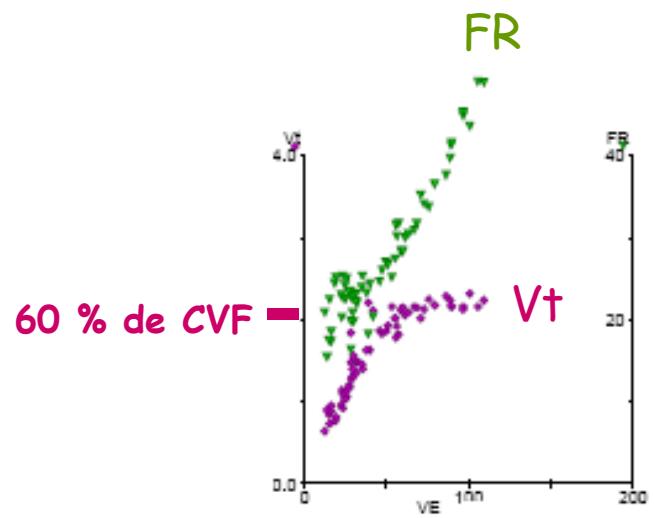
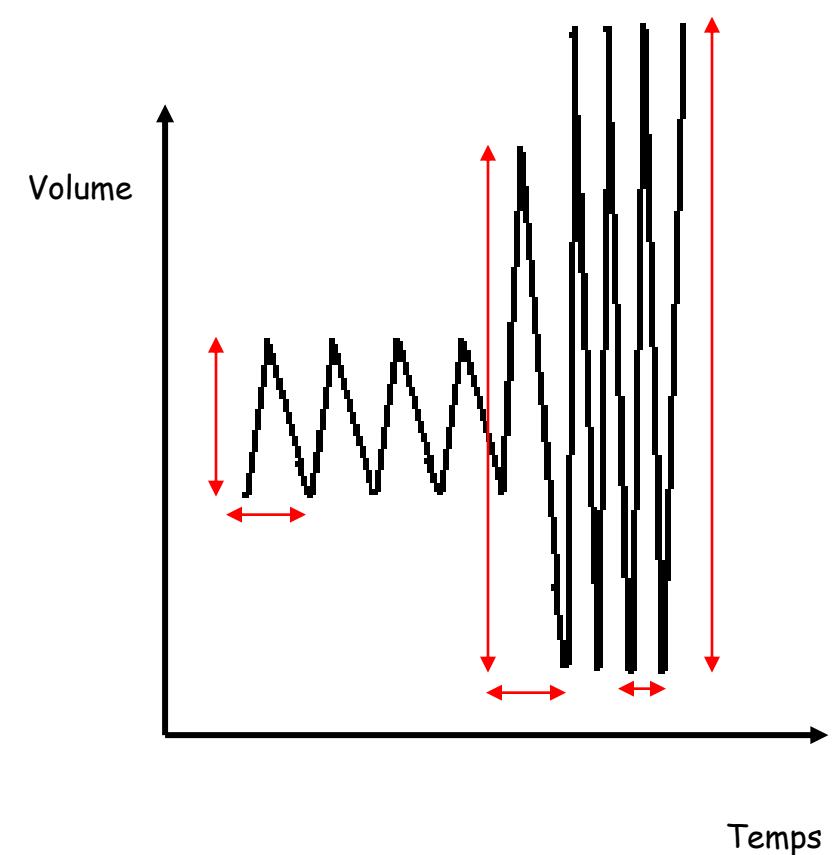


Autre patient



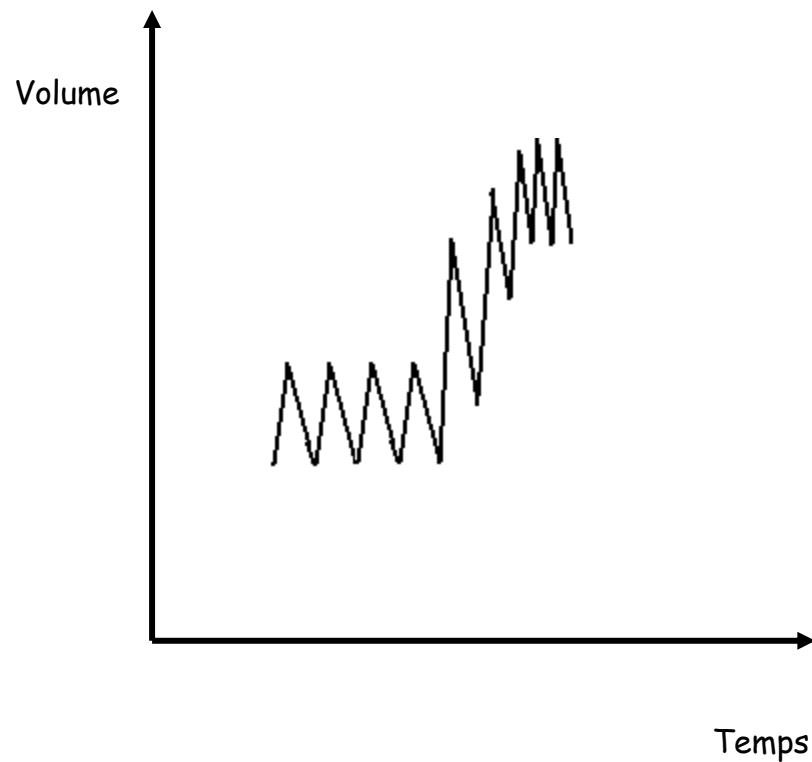
Hyperinflation dynamique

SUJET NORMAL



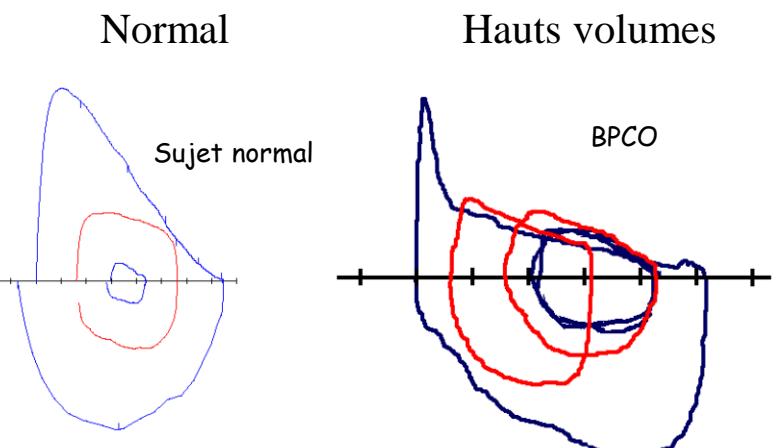
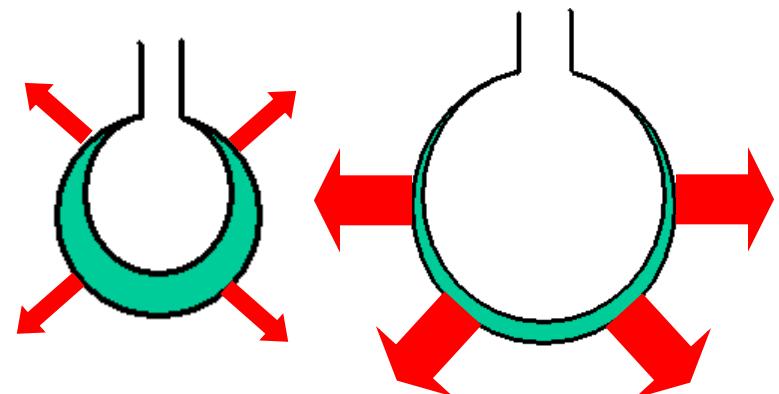
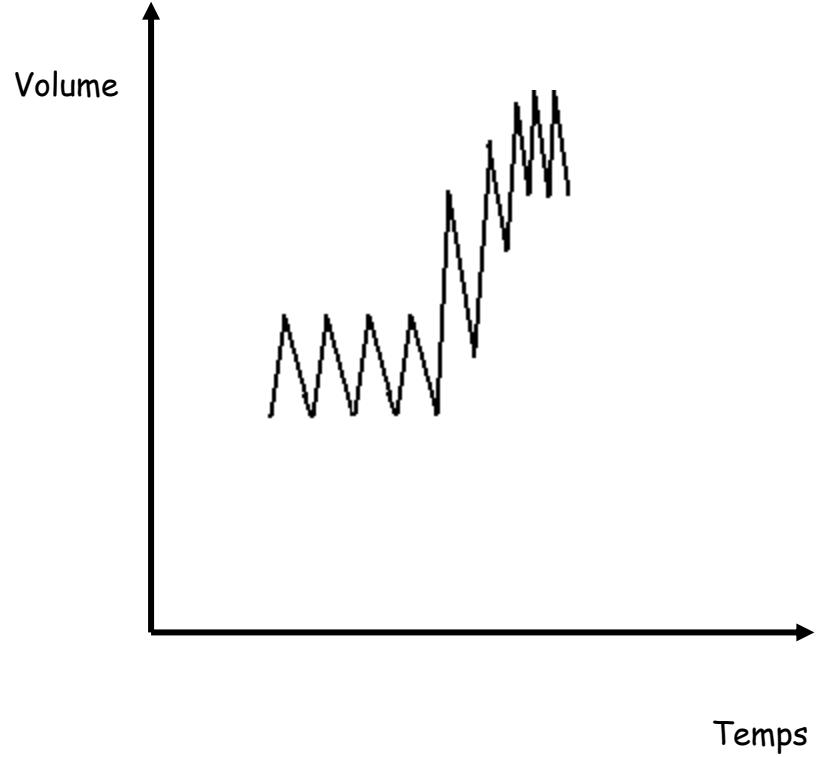
Hyperinflation dynamique

SUJET OBSTRUCTIF ++



Hyperinflation dynamique

SUJET OBSTRUCTIF ++



Hyperinflation dynamique

SUJET OBSTRUCTIF ++

