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All About COPD - Concurrent Workshop Repeated

Sunday, 18 August 2013	Start 8:30am	Duration: 55mins	Da Vinci
	Start 9:25am	Duration: 55mins	Da Vinci

ALL ABOUT COPD

Workshop Session

South GP CME 2013

CASE 1

68 year old man, retired builder

2 year history of progressive breathlessness, only able to walk 1 block along the flat. He has a 40 pack-year smoking history and continues to smoke 10 cigarettes a day.

Chest x-ray - hyperinflated lungs
Spirometry - FEV1/VC 0.65/1.8 (ratio 35%)

Oxygen saturation on air 92%

COPD Assessment Test (CAT)

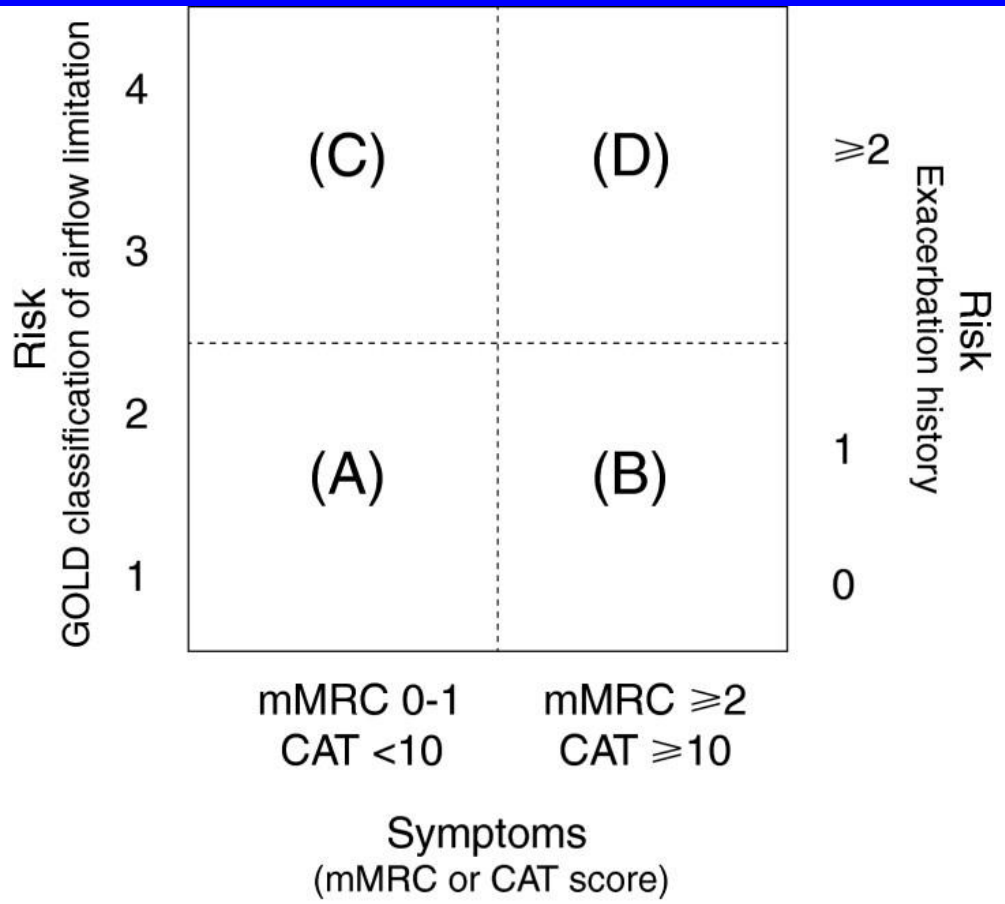
Validated questionnaire designed to determine impact of COPD on a patient's life

- Many patients with COPD are suboptimally managed
- Provides standardised structure to patient consultation and monitoring
- Complements measurements of lung function

Example: I am very happy 0 X 2 3 4 5 I am very sad

			SCORE
I never cough	0 1 2 3 4 5	**I cough all the time**	
I have no phlegm (mucus) in my chest at all	0 1 2 3 4 5	**My chest is completely full of phlegm (mucus)**	
My chest does not feel tight at all	0 1 2 3 4 5	**My chest feels very tight**	
When I walk up a hill or one flight of stairs I am not breathless	0 1 2 3 4 5	**When I walk up a hill or one flight of stairs I am very breathless**	
I am not limited doing any activities at home	0 1 2 3 4 5	**I am very limited doing activities at home**	
I am confident leaving my home despite my lung condition	0 1 2 3 4 5	**I am not at all confident leaving my home because of my lung condition**	
I sleep soundly	0 1 2 3 4 5	**I don't sleep soundly because of my lung condition**	
I have lots of energy	0 1 2 3 4 5	**I have no energy at all**	

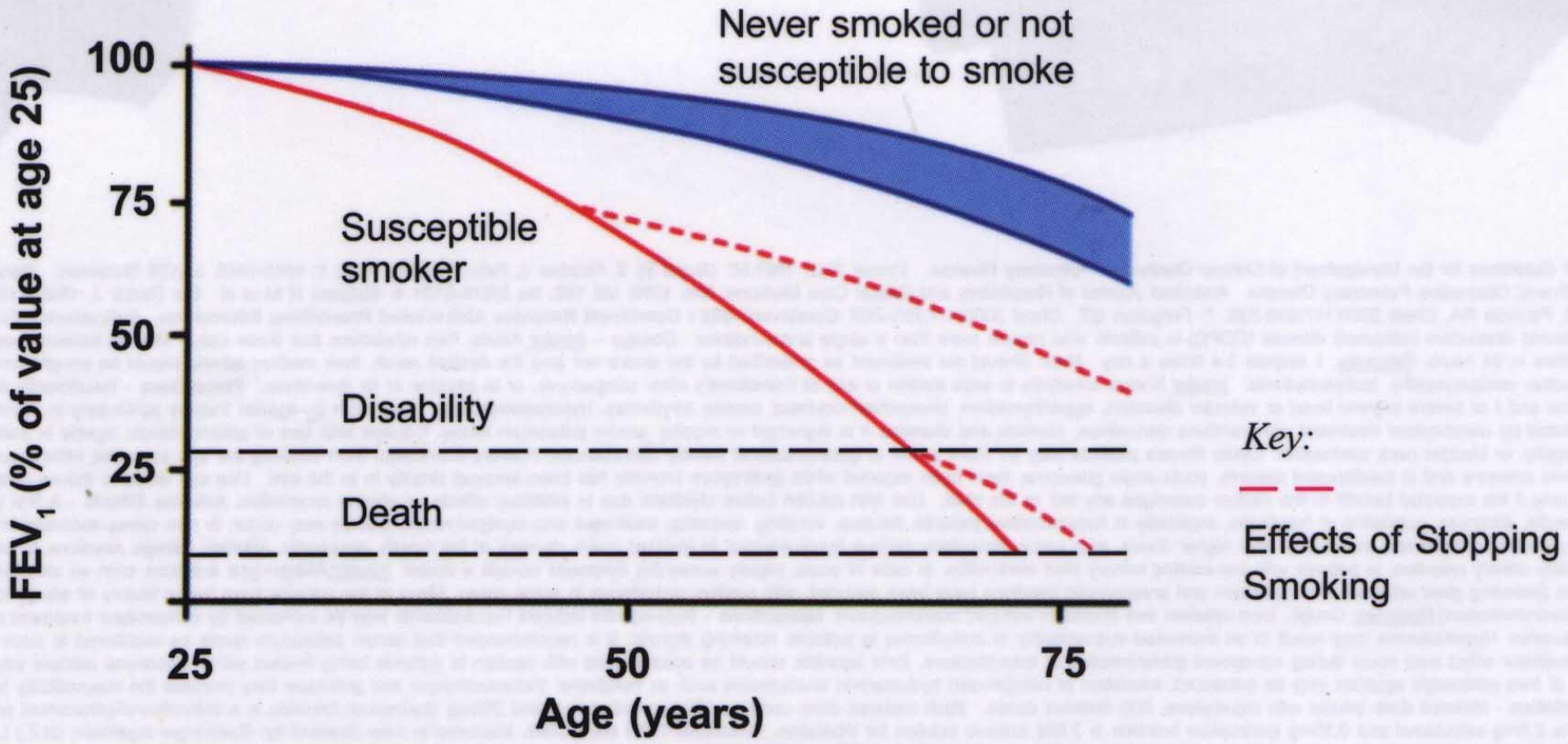
GOLD COPD 2013 Guidelines



Patient category	Characteristics	Spirometric classification	Exacerbations per year	mMRC	CAT
A	Low risk: less symptoms	GOLD 1-2	≤1	0-1	<10
B	Low risk: more symptoms	GOLD 1-2	≤1	≥2	≥10
C	High risk: less symptoms	GOLD 3-4	≥2	0-1	<10
D	High risk: more symptoms	GOLD 3-4	≥2	≥2	≥10

Natural History [2]

Illustration of effects of smoking on rate of decline in FEV_1



Smoking Cessation

- Ask about smoking
- Brief advice
- Cessation support

NRT

Bupropion

Varenicline

Nicotine Replacement Therapy

- Doubles the chances of long term cessation
- Safe - can be administered in pregnancy and to patients with cardiovascular disease
- Ensure patient is prescribed adequate dose and for good period of time

Bupropion

- Antidepressant agent with efficacy in smoking cessation
- Use as second line agent
- Lowers seizure threshold. Beware insomnia, depression, urticaria and skin rash

Varenicline

- Special authority - enrolled in smoking cessation program and has previously failed 2 separate quit attempts
- Partial agonist with activity at α4β2 nicotinic receptors
- Nausea. Beware neuropsychiatric symptoms

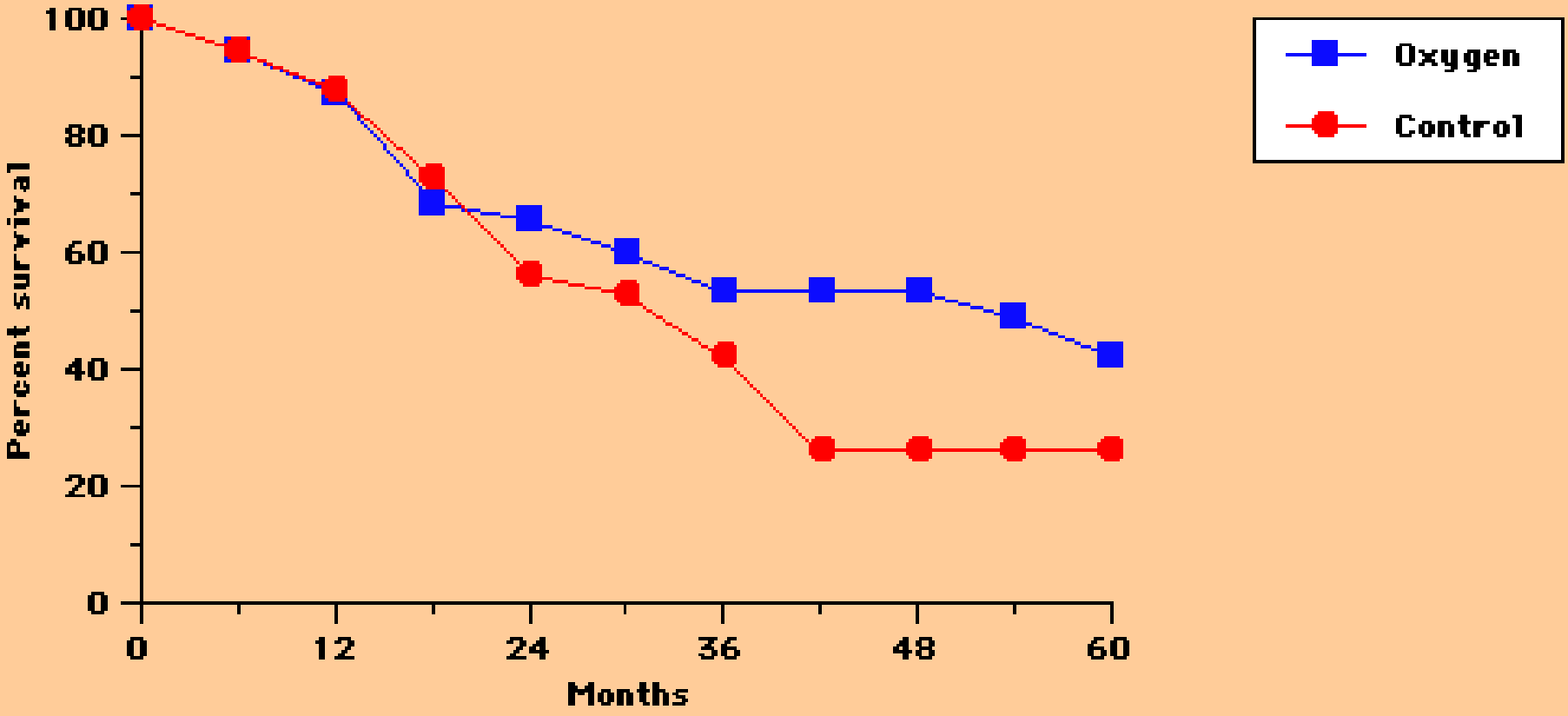
CASE 2

65 year old woman

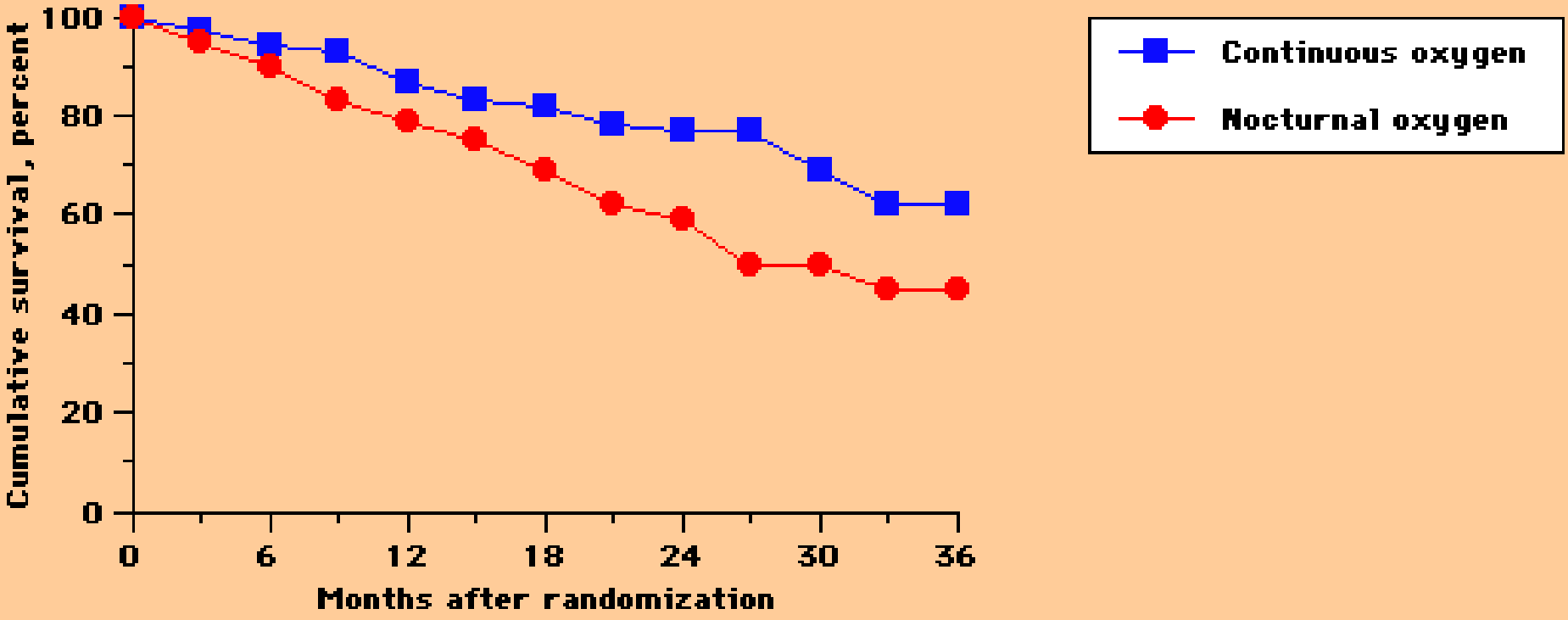
Ex-smoker, previous 30 pack-year consumption
Very limited by dyspnoea, now housebound

On maximal inhaler therapy
Frequent courses of oral steroids, hospitalised with exacerbations approx. 1-2x per year

Chest x-ray shows basal emphyematous bullae
FEV_1 0.65L (30% pred)
Oxygen saturation 88% on room air



Medical Research Council - Lancet 1981



Nocturnal Oxygen Therapy Trial
- Annals Int Med 1980

Guidelines for Oxygen Therapy

- Currently recommended one of the following criteria should be met for LTOT in patients with COPD:
  - PaO_2 < 7.3 kPa (55 mmHg)
  - PaO_2 < 7.8 kPa (59 mmHg) with polycythaemia, pulmonary hypertension or clinical evidence of cor pulmonale

- Disease should be stable. Improvement in hypoxaemia may occur in approximately 30% of patients when followed for three months after an exacerbation of COPD

Pulmonary Rehabilitation

- Aim is to prevent deconditioning and allow patient to cope with his/her disease

- Multi-disciplinary input - physiotherapist, respiratory educator, physician, social worker, occupational therapist, dietitian, pharmacist

- Can improve quality of life, exercise performance
- Does NOT improve lung function

Pulmonary Rehabilitation

- Lacasse et al. *Lancet* 1996
  - Meta-analysis of 14 RCT
- Severe COPD patients in respiratory rehabilitation for minimum of 4 weeks

- Beneficial effect of respiratory rehabilitation on exercise capacity and health-related quality of life
- May reduce hospital admissions

CASE 3

72 year old man, ex-smoker

Frequent admissions into hospital with exacerbations
Long term domiciliary oxygen at 2.0 L/min
Presents with increasing dyspnoea assoc. with bilateral ankle oedema

Chest x-ray shows cardiomegaly with large pulmonary arteries
Oxygen saturation 91% on supplementary oxygen

Cor Pulmonale - Management

- Supplementary oxygen
- Diuretics
  - Frusemide
  - Spironolactone

- Aminophylline
- Anticoagulation
- Venesection - PCV ≥ 0.55

- Digoxin, Ca^{2+} antagonists, vasodilators - limited role

Ceiling of Care and End of Life issues

- Supportive Care Clinic

- ‘Would you be surprised if this patient died in the next 6 months?’