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## AIMS

The objective of this study was to assess autonomic symptoms in subjects with COPD.

(I) Are autonomic symptoms prevalent in subjects with COPD?

(II) What are the most important clinical correlates of autonomic symptoms in subjects with COPD?

## METHODS

### SUBJECTS

COPD (n=53, 39♂/14 ♀, Gold II-IV)

Age: 66±7 years

Height: 1.68±8.2 meters

Weight: 74.4±18.5 kilograms

BMI: 26.1±6.3 Kg/m<sup>2</sup>

FEV<sub>1</sub> (%predicted): 1.17±0.50 (41.9)

FVC (%predicted): 2.78±0.84 (81.5)

PEF (%predicted): 3.65±1.3 (50.2)

### OUTCOMES

ASP: autonomic symptom profile

HADS and SF-36: general health status

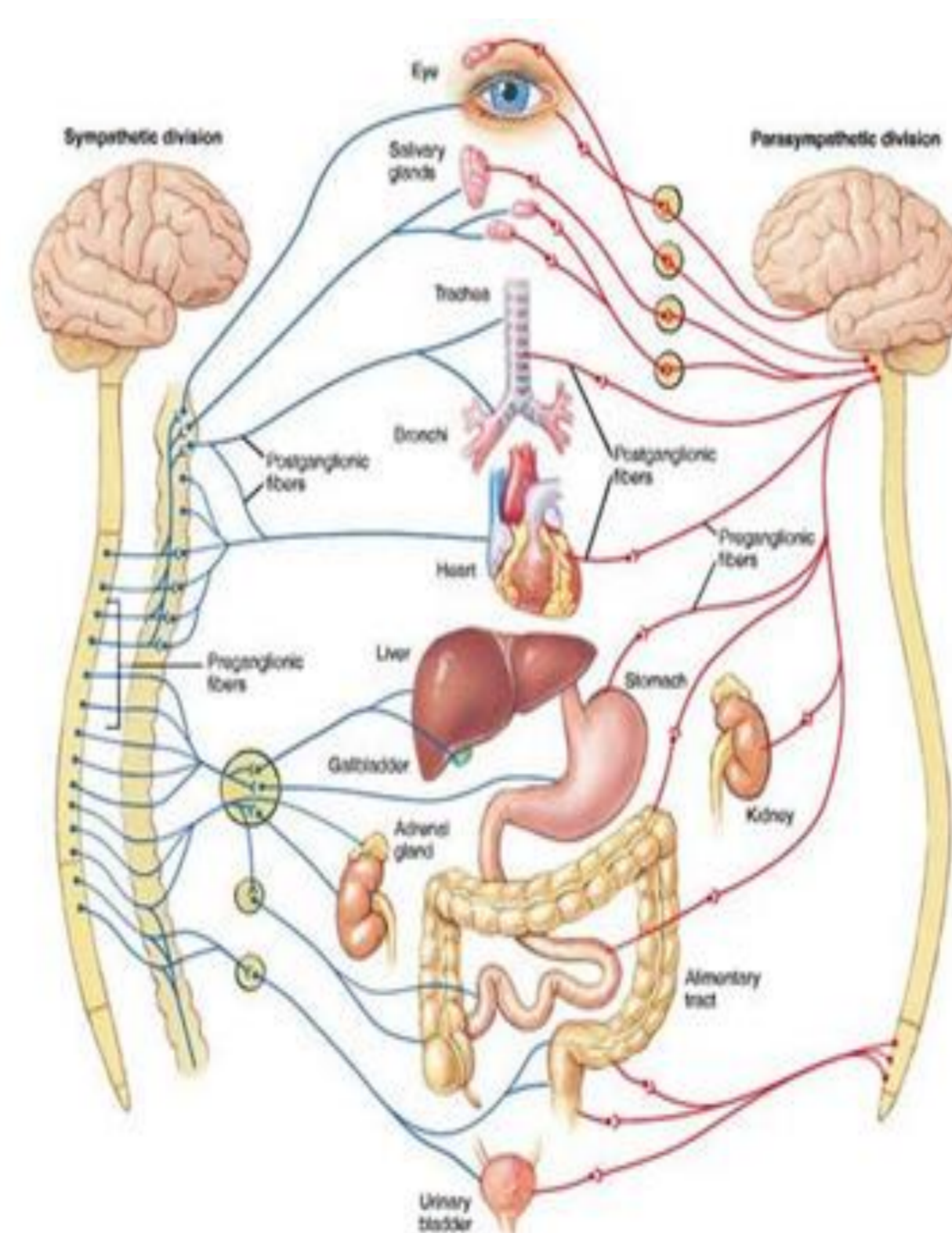
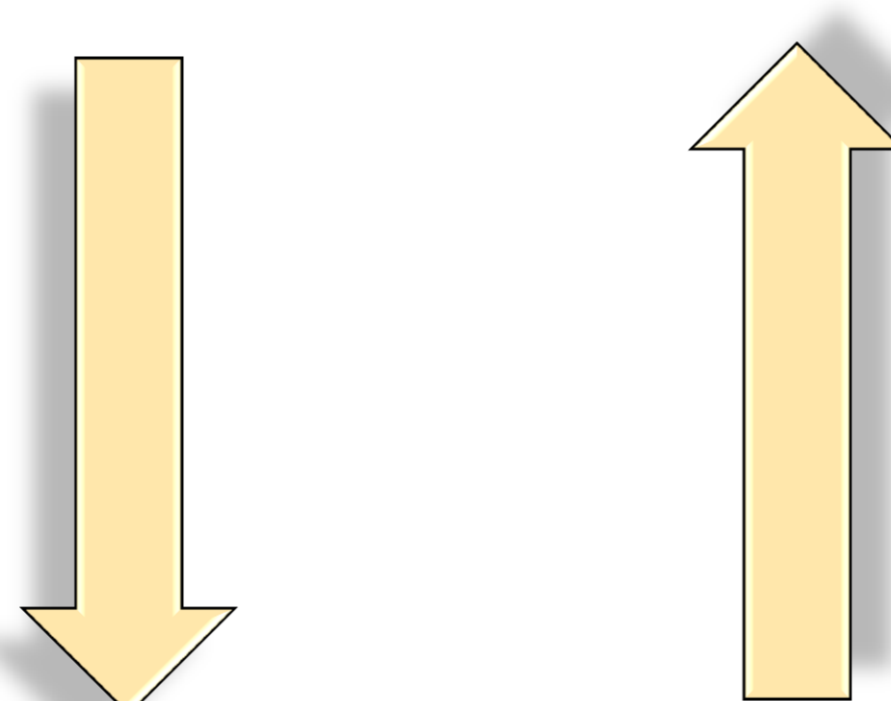
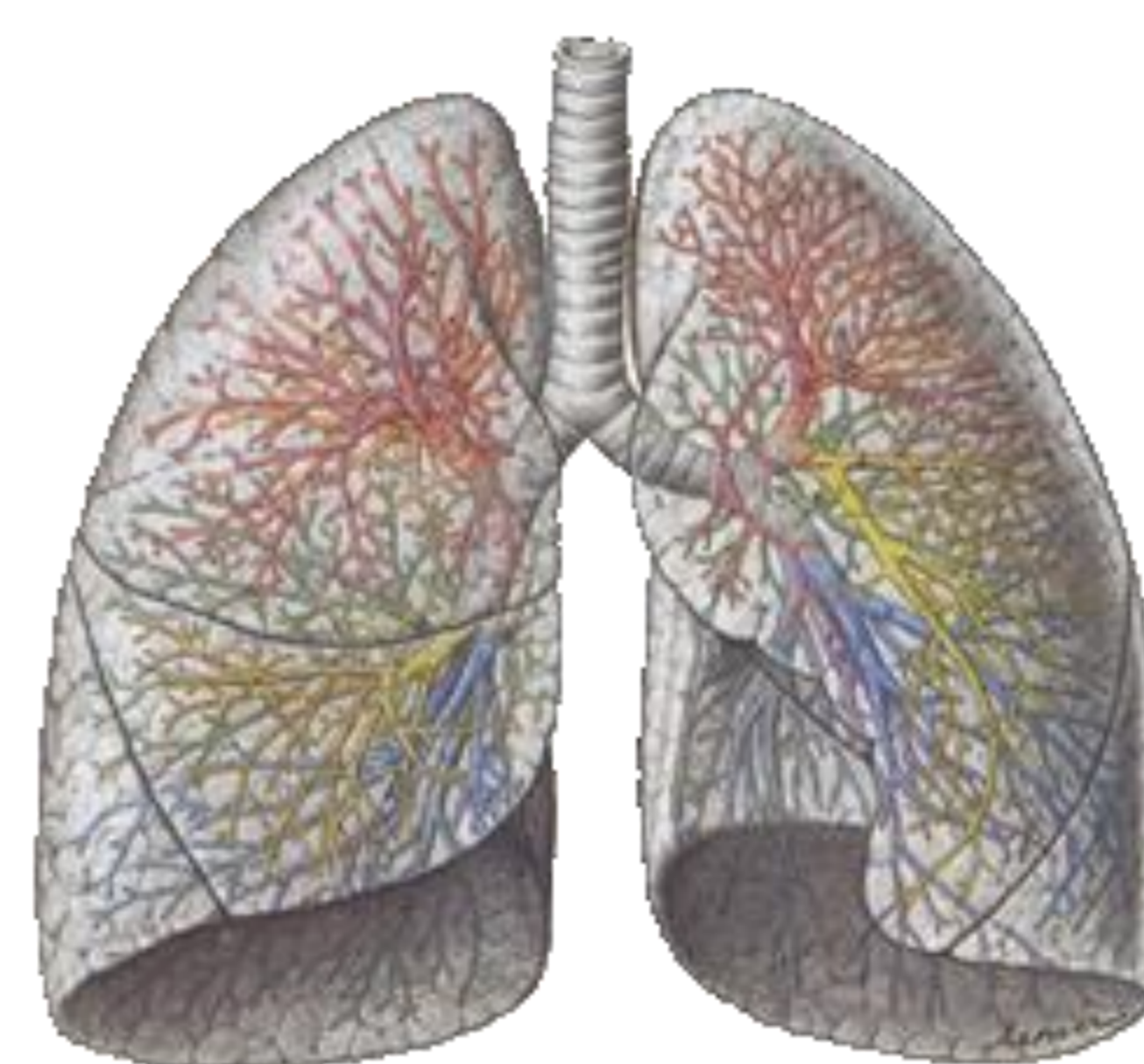
Fatigue: checklist individual strength

Respiratory outcomes: FEV<sub>1</sub>, FVC, PEF & dyspnea

Demographic variables: age, BMI, weight & height

### ANALYSIS

Spearman rho coefficients (significance level: P<0,05)



## RESULTS

Autonomic symptoms were present across all six domains of the ASP. These symptoms were mainly associated with high levels of anxiety, depression and worsened mental health (p<0.05). The presence of severe autonomic symptoms was also associated with poor health status and higher levels of fatigue (p<0.05). However, there were no correlations between the overall ASP scores and demographic or respiratory parameters, except for a diminished pupillomotor function that was mildly associated with reduced FEV<sub>1</sub>.

Domains /Clinical variables	Orthostatic intolerance	Vasomotor	Secremotor	Gastro intestinal	Bladder	Papillo-motor	Total ASP score
Age							
Height							
Weight							
BMI							
FEV <sub>1</sub>						0.286*	
FVC							
PEF							
Anxiety			0.448*		0.281*		0.386*
Depression		0.288*	0.392*				0.391*
Fatigue			0.318*		0.324*	0.312*	0.300*
PCS (SF-36)		-0.352*					-0.358*
MCS (SF-36)	-0.291*			-0.309*			-0.385*
Dyspnea level							

## CONCLUSIONS

Autonomic complaints are prevalent in subjects with COPD especially in those who have higher levels of anxiety, depression, fatigue, and poor general health. This highlights the need for screening autonomic function in COPD patients who fit this profile and their treatment should be adapted accordingly.

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