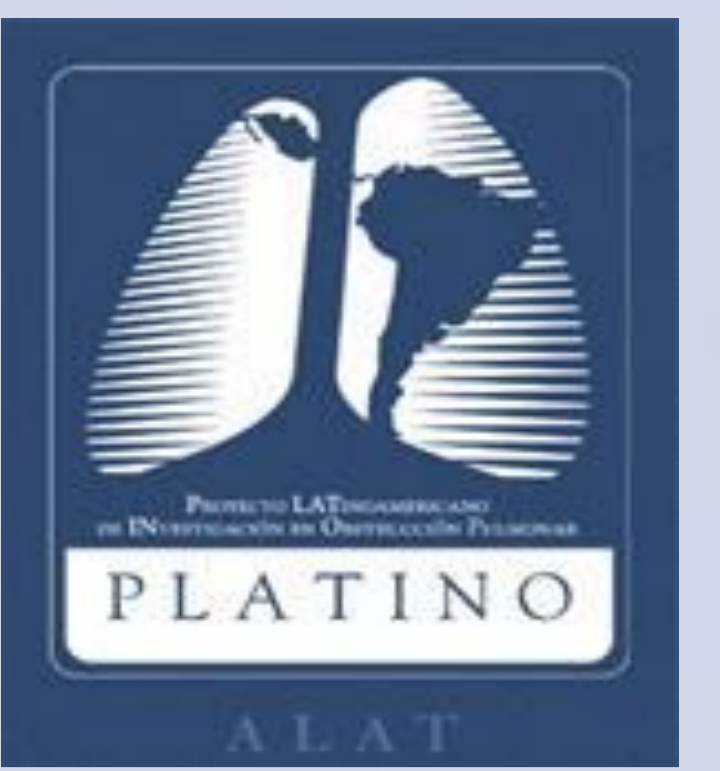




THE PLATINO COHORT STUDY: THE NATURAL HISTORY OF COPD

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INTRODUCTION

The knowledge of the natural history of COPD allows us to adopt some preventive policies. Being spirometry the key point for the diagnosis of this disease, it is important to follow subjects prospectively and to measure the predictive values of the test.

METHODS

A multicenter cross sectional study on the prevalence of COPD was carried out in five centers of Latin America (the PLATINO I study). Five years later a follow-up was conducted in one of the centers: Montevideo, Uruguay. This was called: the PLATINO II study. The same sample of subjects was visited again and the same instruments were applied. Spirometry was performed using the NDD spirometer pre and post bronchodilator (BD).

RESULTS

From the original sample of 883 subjects with valid spirometry seen in 2003, in Montevideo, 87.3% of them were followed 5 years later. Excluding deaths (71), refusals and losses the sample was composed by 683 subjects with spirometry pre and post BD.

Characteristics of the sample (N =683)

Variables	N	%
Sex		
Men	279	40,9
Women	404	59,1
Age		
45-54	202	29,6
55-64	194	28,4
≥ 65	287	42,0
Schooling (years)		
0-2	38	5,6
3-4	80	11,8
5-8	269	39,7
≥ 9	290	42,9
Smoking		
Never	283	41,7
Former	244	36,0
Current	151	22,3
Lifetime cig. smoked		
Never	286	42,3
≤1 pack-year	28	4,1
1.1-10 pack-year	99	14,6
>10 pack-year	264	39,0
Hosp.resp. problems childhood		
No	662	97,6
Yes	16	2,4
BMI (kg/m ²)		
<18.5	10	1,5
18.5-24.9	148	21,9
25-29.9	254	37,6
≥ 30	264	39,1
Comorbidities		
0	208	30,3
1	253	36,8
2	158	23,0
3 or more	68	9,9

Prevalence of COPD in PLATINO II according to the fixed ratio criterion

FIXED RATIO	PLATINO II	
	COPD	No COPD
PLATINO I		
COPD	102	14
No COPD	88	479

Positive Predicted Value: 87.9%
Negative Predicted Value: 84.5%
88 out of 567 subjects with no COPD in PLATINO I developed the disease over the five-year period.

Prevalence of COPD in PLATINO II according to the GOLD II-IV criterion

GOLD II-IV	PLATINO II	
	COPD	No COPD
PLATINO I		
COPD	32	7
No COPD	24	620

Positive Predicted Value: 82.1%
Negative Predicted Value: 96.3%
24 out of 644 subjects with no COPD in PLATINO I developed the disease over the five-year period.

DISCUSSION

Most subjects who were classified as having COPD in PLATINO I confirmed this diagnosis in PLATINO II.

New cases were much more frequent using the fixed ratio criterion.

The proportion of subjects who were classified as having COPD in PLATINO I, but not in PLATINO II was very low, regardless the criterion used.

Most subjects who developed COPD over the five-year period were smokers according to the GOLD II-IV criterion. For the FR criterion, the main variable associated with a new diagnosis was age, and not smoking.

Website: <http://www.platino-alat.org/>

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