Clinical characteristics of tuberculosis patients with diagnostic delay in Cali, Colombia

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Background

Early diagnosis of tuberculosis (TB) and treatment are determining factors to decrease the spreading of the disease. We aimed to assess the diagnostic delay of infectious TB and to identify risk factors among TB patients in Cali, Colombia.

Matherials and Methods

Retrospective cohort study that analysed TB patients enrolled in an on-going TB-Cohort Study in Cali, between 2011-2016. Diagnostic delay was defined as the interval from the onset of TB symptoms until the time of TB diagnosis for more than 30 days. All patients received treatment at the diagnosis.

Results

We included data from 315 patients. In 62.2% patients had diagnosis delay. New cases 92,3%. The median age was 41 years (IQ:0-91), Males were 51.1% and 13,8% were HIV-infected. At multivariate level, living in urban area (*p*=0.04; OR=0.38, 95%CI:0.1-0.9) and solid organ transplant (*p*=0.02; OR=0.24, 95%CI:0.0-0.8) appears to be a protective factor against the delay in TB diagnosis. In terms of outcomes 80.1% of the delay TB diagnosis patients were successfully treatment (*p*=0.44; OR=1.2, 95%CI:0.71-2.14), 12.2% died (*p*=0.259; OR=0.69, 95%CI:0.36-1.3), 5.6% were considerate as failure (*p*=0.064; OR=7, 95%CI:0.89-55), and 4% were lost during follow-up (*p*=0.085; OR=0.3, 95%CI:0.09-1.16).

Bibliografía

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Resultados

Table 1. Analyses of socio-demographic and risk factors associated with TB diagnosis delay

			Analysis			
Variables	**All patients**	**Delay diagnosis**	**Univariate**		**Multivariate**	
	(n=315)	(n=196, 62%)	OR (95%IC)	*p*	OR (95%IC)	*p*
Demographic variables						
Age, Median [Interval] years	41 (0-91)	41 (0-91)				
Male	164 (52.1)	100 (51.1)	0.89 (0.5-1.4)	0.63		
Afro-Colombians	35 (11.1)	23 (11.7)	0.93 (0.3-2.2)	0.88		
Urban area	286 (90.8)	173 (88.3)	**0.39 (0.1-1.0)**	**0.05**	**0.38 (0.1-0.9)**	**0.04**
Risk factors						
Smoking	51 (16.2)	37 (18.9)	**2.05 (0.6-6.5)**	**0.22**		
HIV-positive	49 (15.6)	27 (13.8)	0.81 (0.2-3.2)	0.77		
Recent contact	42 (13.3)	29 (14.8)	1.67 (0.4-5-8)	0.41		
Diabetes	34 (10.8)	17 (8.7)	0.36 (0.1-1.1)	0.74		
Solid organ transplant	28 (8.9)	10 (5.1)	**0.23 (0.7-0.8)**	**0.22**	**0.24 (0.0-0.8)**	**0.02**
Previous TB-infection	27 (8.6)	18 (9.2)	0.73 (0.3-1.6)	0.45		
Cancer	25 (7.9)	14 (7.1)	**0.47 (0.1-1.6)**	**0.23**		
Health worker	22 (7.0)	12 (6.1)	**0.52 (0.1-1.6)**	**0.25**		
Abuse Drugs	9 (2.9)	7 (3.6)	1.27 (0.1-8-8)	0.80		
Pregnancy	6 (1.9)	3 (1.5)	0.65 (0.1-3.3)	0.61		
Prison history	6 (1.9)	5 (2.6)	4.16 (0.3-48)	0.25		
Hepatitis-C	4 (1.3)	3 (1.5)	2.76 (0.2-30)	0.40		
TB pulmonary presentation	220 (69.8)	138 (70.4)	1.07 (0.6-1.7)	0.77		

Conclusions

The diagnostic delay of TB doesn't depend on the TB risk factors, instead, it can be associated with difficulties in our health care system at identifying promptly the patients with Tuberculosis. Delayed TB diagnosis was not associated with a worse treatment outcome. Identifying major delays and developing evidence-based approaches to address those delays will help reduce the TB incidence in Cali, Colombia.

Contact

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