Tuberculosis in a Portuguese Cohort

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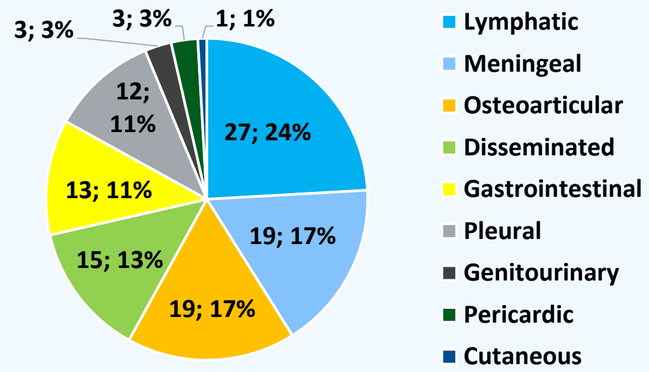
Backgroud: Tuberculosis (TB) is a multisystemic disease and one of the leading causes of infectious disease-related mortality worldwide. Being often unrecognized, there can be relevant delays in its' diagnosis. TB is also one of the most common opportunistic infections and cause of death in AIDS patients. This study aims to characterize patients with TB in a Portuguese cohort.

Material/Methods: Retrospective analysis of record files of inpatients admitted between 01/2005-12/2014 with diagnosis of TB. Data were analysed using $\chi 2$ or Fisher exact test when appropriate ($p<0.005$ = statistically significant) and odds ratio was calculated.

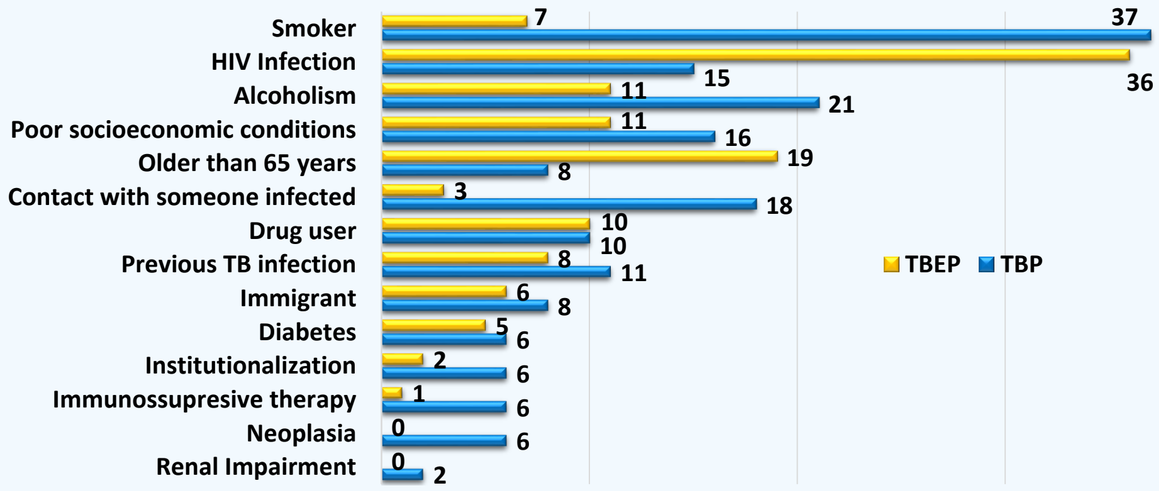
Results:

222 patients	Pulmonary tuberculosis (PTB)				Extrapulmonary tuberculosis (EPTB)			
	Total	**Men**	**Women**	***p***	**Total**	**Men**	**Women**	***p***
Nr of cases	128 (57.7%)	98 (76.6%)	30 (23.4%)	-	100 (45.0%)	56 (56.0%)	44 (44.0%)	-
Median Age (years)	40 (IQR 29.5-50.5)	42 (IQR 32.0-50.8)	35,5 (IQR 26.3 – 45.8)	*0.000*	44,5 (IQR 35.0-57.0)	48 (IQR 35.8-56.6)	49 (IQR 30.0-64.5)	*0.058*
Lengh of stay (days)	17 (IQR 11.0-24.0) [0-30[- n=111 ; [30-60[- n=14 ; ≥ 60 - n=3			*0.064*	18 (IQR 8.8-27.8) [0-30[- n=77 ; [30-60[- n=21; ≥ 60 - n=2			*0.076*
Year of hospitalization (n)	**2005-2009**		**2010-2014**	*0.004*	**2005-2009**		**2010-2014**	*0.003*
	70 (54.7%)		58 (45.3%)		60 (60.0%)		40 (40.0%)	



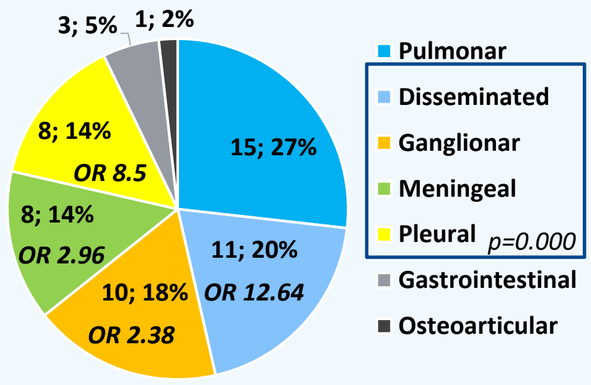
- **Constitutional symptoms/signs or cough were common in PTB.**
- **ETB presentation was ill-defined or with focal symptoms.**

Risk factors were present in 63.5% (n=142) : 72.7% in PTB *(p=0.002)* and 55.0% in EPTB *(p=0.012)*



- **PTB was asssociated with smoking *(p 0.000, OR 5.05)* and contact with TB-infected person (*p 0.002, OR 7.53).***
- **HIV infection (*p 0.000, OR 5.16)* and age over 65 *(p 0.005, OR 3.34)* associated with ETB.**
- **Increased risk of PTB in patients that use immunosuppressive therapy or institutionalized (*OR 4.57*).**

HIV +



- **48 patients were HIV-infected (PTB n=15, ETB n=36).**
- **70.8% of cases occured on HIV diagnosis (n=34).**
- **Median CD4 count (n=40) was 74.5 cells/µL (13-136).**
- **Negative association with pulmonary (*OR 4.08)* and osteoarticular forms *(OR 5.42)***

Diagnosis (all patients)	**TBP**	**TBEP**	**HIV**
Confirmed (culture or PCR + smear)	**104** (81,3%)	**14** (14,0%)	**17** (35,4%)
Probable (PCR or smear or histology)	**14** (10,9%)	**41** (41,0%)	**16** (33,3%)
Possible (clinical criteria)	**10** (7,8%)	**45** (45,0%)	**15** (31,3%)

Clinical outcome was mostly favourable (PTB 98.4%; ETB 94.0%). Eight patients died.

Conclusion: TB remains an important healthcare issue, although incidence is decreasing in Portugal. Contact with a TB-infected person and smoking (PTB) and HIV infection and age over 65 (ETB) were relevant risk factors. Most clinical characteristics were consistent with literature. Risk of ETB in HIV patients seems to be higher than PTB. HIV infection was associated with disseminated, pleural, meningeal and lymphatic disease.

Bibliografia: 1- WHO. Global TB control report 2015. 2- NICE. Clinical diagnosis and management of tuberculosis, and measures for its prevention and control. 2011. 3- Bernardo J. Clinical manifestations, diagnosis, and treatment of extrapulmonary and miliary tuberculosis. Uptodate. 4- Pozniak A. Clinical manifestations and complications of pulmonar tuberculosis.