



Pulmonary tuberculosis in the elderly : a series of 163 cases

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Background

Algeria is considered as a country with moderate prevalence of tuberculosis (TB). In 2010, the incidence of pulmonary TB is 24.8/100.000 (1) and patients older than 65 years represent 5.4% of the population (2).

Aims

To compare the clinical features and clinical course of pulmonary TB occurring in older and younger patients, in order to identify a profile of this pathology in the elderly.

Methods

A retrospective and comparative study about 163 patients with pulmonary TB recruited by our department over a period of three years (2011, 2012 and 2013). Two groups were compared, the first called G1 (< 65 years), including 131 patients, the second called G2 (> 65 years) comprising the 32 others.

Results

Population

Mid age: **68,9** years (vs 32,3 years for young).
 Extremes : 65– 92years.
 Sex-ratio = 1,13 (17 men / 15 women).

Age

The 32 patients of G2 (19,6%) had a mean age of 68,9 years versus 32,3 years for G1. The sex ratio was 1.73 in young and 1,13 in seniors.

Tuberculous contagium

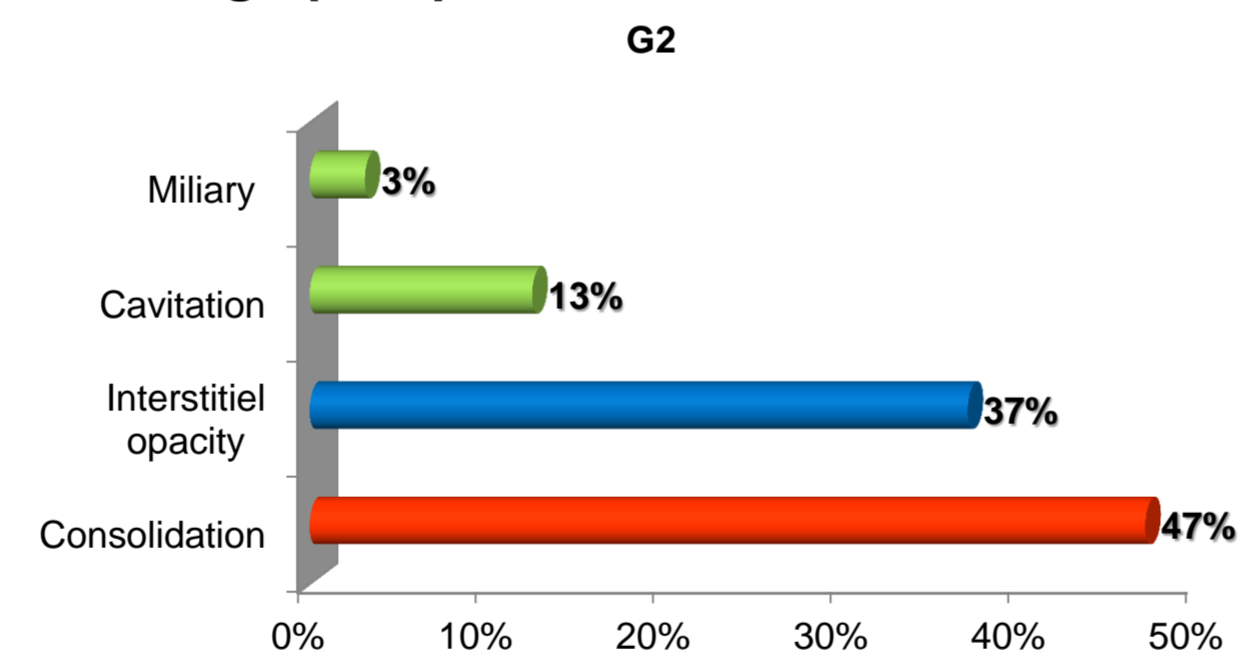
Only three old patients (9,3%) had a familial history of TB contact, while this notion is found in 62% of young patients.

Clinical signs

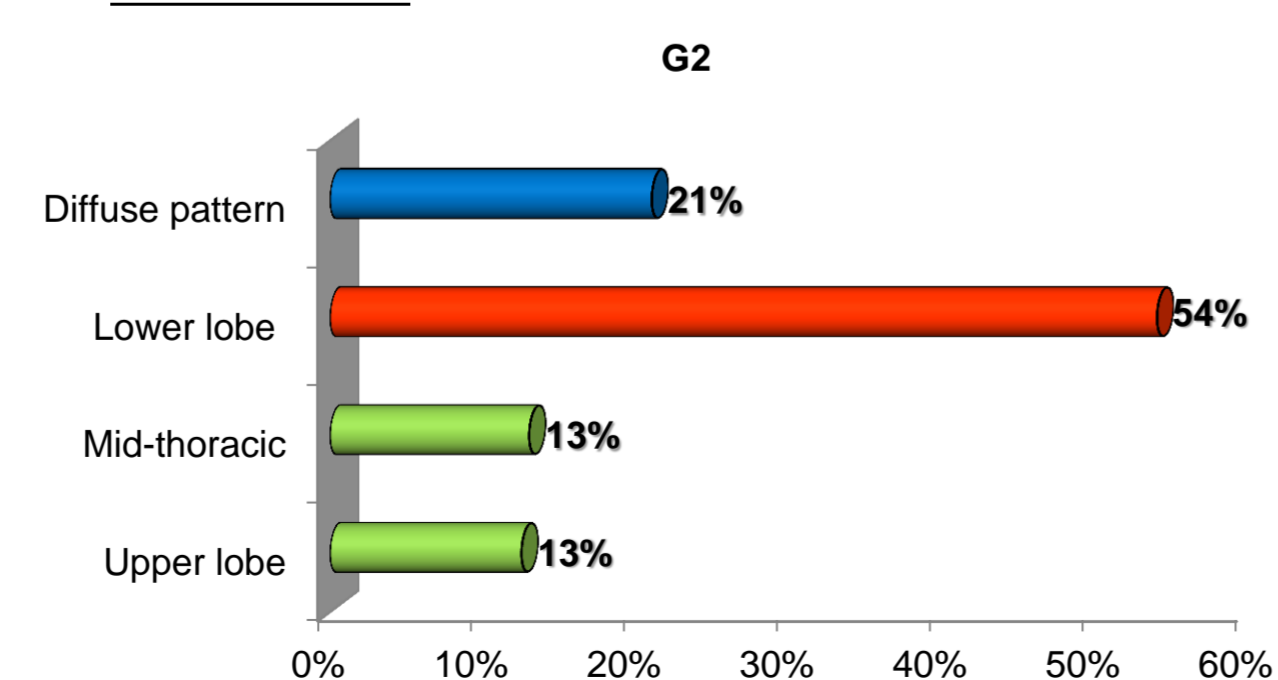
	Older subjects (G2) n = 32	Younger subjects (G1) n = 131
Fever	12 (37,5%)	47 (36%)
Cough	21 (66%)	39 (30%)
Sputum	07 (22%)	47 (36%)
Dyspnea	08 (23%)	21 (16%)
Hemoptysis	06 (19%)	21 (16%)
Chest pain	07 (22%)	17 (13%)
Progressive start of symptoms	21 (66%)	110 (84%)

Chest radiograph

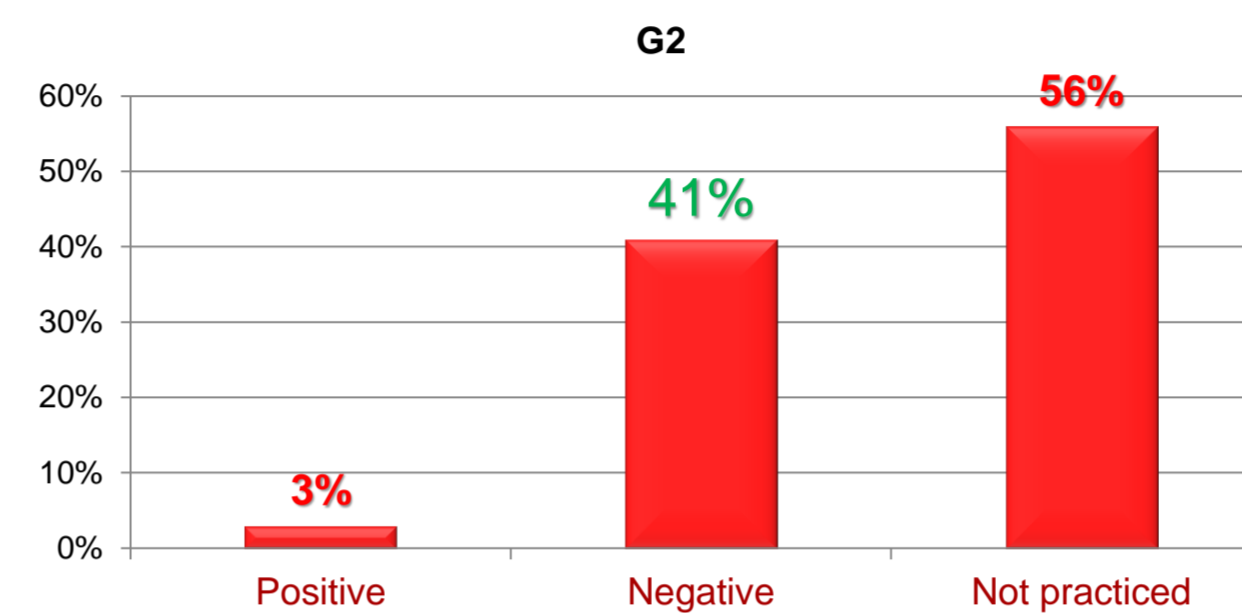
Radiographic patterns



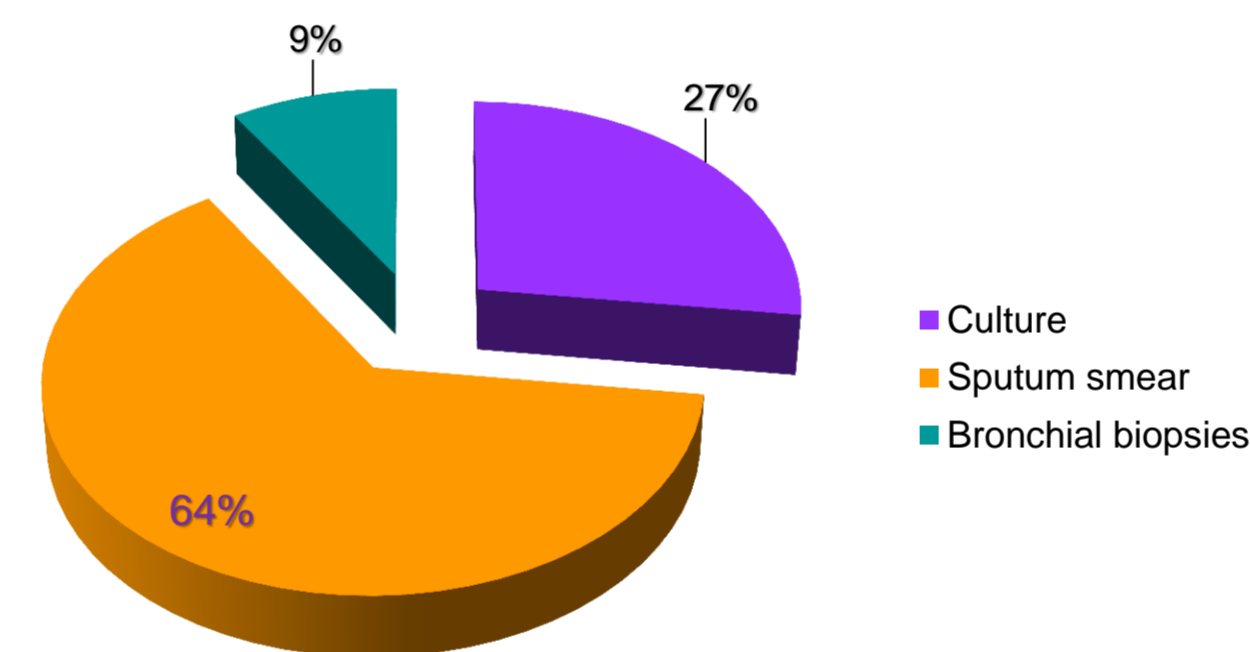
Distribution



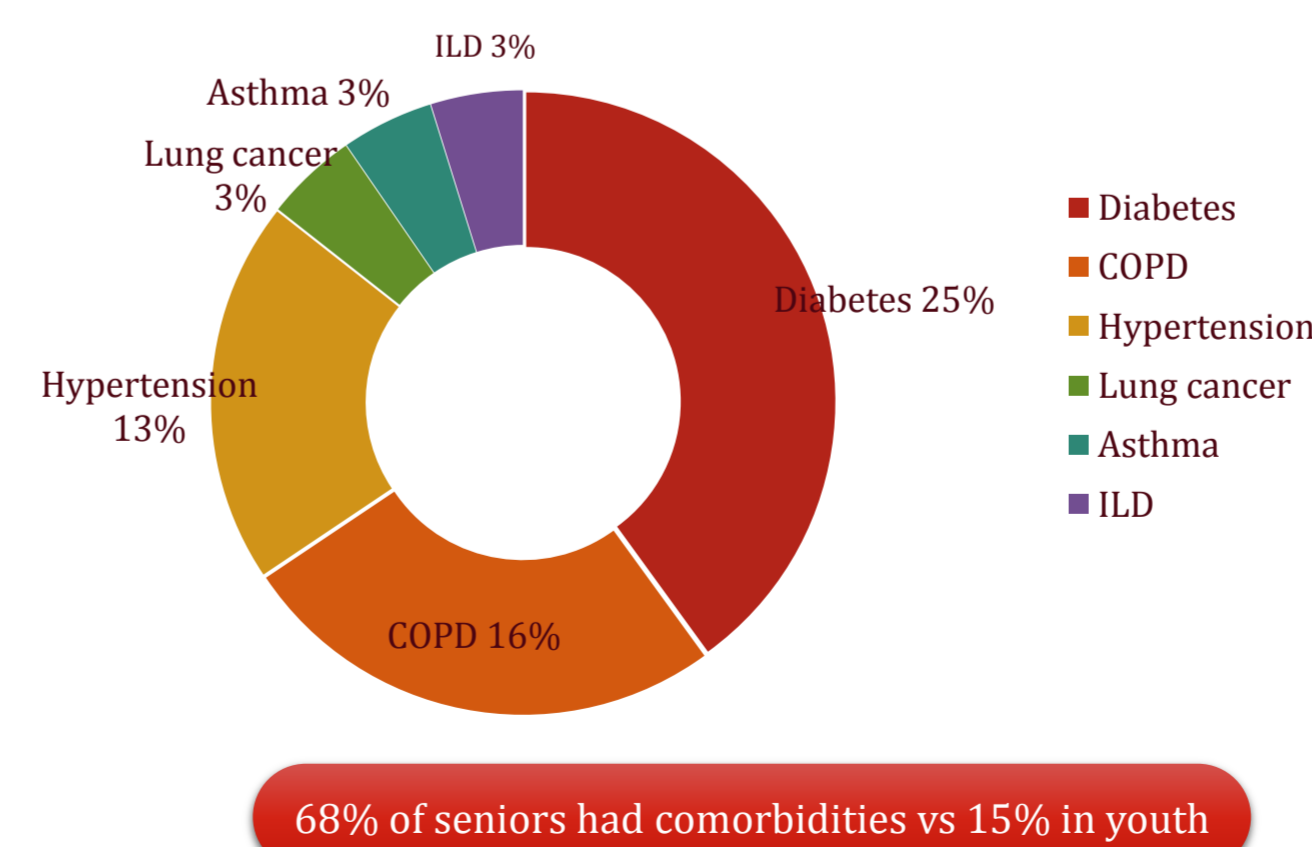
Tuberculin Skin Test



Diagnostic evidence



comorbidities



68% of seniors had comorbidities vs 15% in youth

Evolution

	Older subjects (G2) n = 32
Complications	7 (22%)
Meningitis	3 (9%)
Massive haemoptysis	1 (3%)
Thrombophlebitis	1 (3%)
Pleural involvement	2 (6%)
Adverse events	
Skin allergy	2 (6%)
Drug-induced hepatitis	5 (16%)
Digestive disorders	3 (9%)
Relapses	2 (6%)
Defaults	2 (6%)
Deaths	3 (9%)

Comments

Pulmonary TB in elderly represents 19,6% in our series, while TB in the USA involves 20% of institutionalized patients over 65 years (3) and 23% of cases in Switzerland (4). Sex ratio worldwide varies between 0,6 and 5 (1,13 in our serie). Symptoms in this population are dominated by coughing and expectoration, these features were found by other authors (5). Radiographic abnormality, particularly the basal location was found in 54% of cases. Bacteriological evidence is often laborious, and may require an endoscopic exploration via aspiration and / or bronchial biopsy, technique used by other authors (6). The onset of TB on a sequelar lung (05 cases, 22%) and the high rate of comorbidities (68% in G2 vs 15% in G2), as well as immunosenescence on this ground, may explain the occurrence of endogenous reactivation in most cases.

Bibliography

1. Algerian guide for TB control. Edition 2011
2. Algerian national office of statistics. www.ons.dz.
3. Stead WW, et al. Tuberculosis as an endemic and nosocomial infection among the elderly in nursing homes. NEJM. 1985; 312: 1483-7.
4. Janssens JP, Zellweger JP. Clinical epidemiology and treatment of tuberculosis in elderly patients. Schweiz Med Wochenschr 1999;129:80-9
5. Tidjani C, et al. Pulmonary tuberculosis in the elderly. Lome (Togo). 1982-1988. Med Afr Noire 1991;38: 518-25
6. Feron C. Characteristic of tuberculosis in the elderly. Rev Mal Respir. 2008 vol 25 p60-61.