TUBERCULOSIS MANAGEMENT: WHAT HAVE CHANGED?

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More than 130 years after the discovery of the Koch Bacillus, Tuberculosis (TB) continues to challenge the international medical community. Robert Koch (Nobel Prize for Medicine in 1905) identified the “Mycobacterium Tuberculosis” as the specific causative agent of TB in 1882. The Tuberculin Skin Testing for TB (TST) and BCG vaccine were introduced in the management of TB during the last century. Streptomycin, the first therapeutic drug of TB, was invented in 1944 by Selman Abraham Waksman (Nobel Prize for Medicine in 1952). All of the main TB-drugs were developed during the 25 years that followed. TB-related research stopped for several years until the re-emergence of tuberculosis in developed countries at the end of the 20th century, especially as a consequence of the acquired immune deficiency syndrome (AIDS). Thus, the diagnostic strategy has been improved (PCR assay especially the new automated systems “gene Xpert and HAIN”, dosage of gamma interferon...etc.); new TB-drugs and regimens were developed (Linezolid, Bedaquiline, Delamanid...), and the world is now expecting a new vaccine that might be developed before the end of this decade.

In Morocco, after the restructuration of the “National Fight against Tuberculosis Program” (“Plan National de Lutte anti-Tuberculeuse: PNLAT”) elaborated in 1991, we have observed a decrease in the incidence rate of TB during the first years before it got stabilized. During the past 10 years, the incidence rate oscillated between 82/100.000 and 85/100.000 hab. and the number of cases ranged between 25.000 and 28.000 per year. However, we report a slight decrease (1 to 3 % per year) of pulmonary tuberculosis -which is responsible for the contagion and spread of the disease in the community- and a significant increase in extra-pulmonary tuberculosis forms, with particularly lymph node and pleural localizations (30% of all forms of tuberculosis in 1991 vs. 47.5% in 2014).

Two epidemiological phenomena hinder TB control worldwide: the co-infection TB-HIV and the emergence of multi-drug resistant tuberculosis (MDR-TB). Fortunately, in Morocco, the rates of MDR-TB (0.5%) and co-infection (1.7%) are low, but the indicators show an ascent in the last years. The increase of migration movements and immunodeficiency conditions (diabetes, biotherapy...) could further complicate this situation. Finally, we must double our efforts to achieve the final goal of the Moroccan PNLAT, which is the eradication of tuberculosis by 2050.