Letters to the editor

RESP

The need to update recommendations for controlling tuberculosis in Spanish prisons

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Dear Director:

We read with great interest the article entitled "Descriptive study on the use of interferon-gamma release assays on an inmate population with positive tuberculin tests at Burgos prison", by Baca et al., which was recently published in the Spanish Journal of Prison Health[1]. In the conclusions, the authors advise authorities to update the recommendations for controlling tuberculosis (TB) in prisons managed by the Spanish Ministry of Home Affairs. We agree with this advice and would like to support this assertion with some comments on the issue:

1. In the study mentioned above, the authors regard infected persons as "inmates with tuberculin test results equal to or greater than 10 mm", although this is not the criterion habitually used in Spanish prisons managed by the Ministry of Home Affairs, which establishes positive values as those that "are equal to or more than 5 mm, regardless of the vaccination status"[2]. Setting a positive level of a tuberculin test at 10 mm upwards, except in the case of special groups, is recommended by the CDC (Centers for Disease Control and Prevention)[3,4] for countries with an incidence like the one found in Spain, and is considered to be an advisable level according to documents issued by some regional health administrations[5].

2. The current Tuberculosis Prevention and Control Programme in the prison setting[2] does not recommend the use of QuantiFERON® (QTF), as Baca *et al.* comment in their study. However, preference is given in current guidelines of the CDC[3,4], and in recent reviews on latent tuberculosis infection (LTI)[6], to the diagnostic use of interferon gamma release assays (IGRA), even when the tuberculin test is regarded as acceptable. Despite such recommendations, the technology and higher costs involved in IGRA probably make more widespread use of this type of assay unlikely in Spanish prisons. One option could therefore be to use this type of assay only in certain situations. An example would be to confirm positive tuberculin tests, which is what Baca *et al.* do in their research, or as a way to differentiate between false TT positives (in persons vaccinated with the bacillus Calmette-Guérin vaccine) or false negatives (mainly in children and immunosuppressed patients). The latter option was recommended by the Spanish Society of Respiratory Pathologies (SEPAR) in 2008[7], and has been used in Catalonian prisons in recent years.

3. As commented above, in the study by Baca et al., IGRA tests were use for all cases with positive TT, regardless of whether they had been vaccinated with BCG or not. This option, which is without doubt an adequate one, is difficult to apply on a general basis due to the technology involved in IGRA, and because it is an expensive process, especially for populations such as prison inmates, where there is a high prevalence of infection. There is also a high risk of discordant results (unconfirmed positive or negative TT via QTF). This was observed in the study, where the global discordance was 55% and, as was to be expected, was found to be even greater (70%) in the group of vaccinated cases. Given the difficulties in extending the use of IGRA testing, a more efficient option may be to request these tests as a confirmation if there is a background of prior vaccination with BCG. This type of previous vaccination is increasingly uncommon amongst Spanish inmates, since systematic vaccination in Spain ceased in 1980, although it continued to be used in the Basque Country until 2013[8]. However, it

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is more common amongst foreign inmates, given that BCG has a coverage of about 90% in countries with a high incidence of TB[9].

4. Another factor that requires revision in the Tuberculosis Prevention and Control Programme is the treatment of LTI, since the detection and treatment of LTI has become an essential measure for controlling TB alongside the early treatment of cases with active TB[9]. However, it should be remembered that the evolution from infection to disease takes place in 5-15% of infected cases[4]. Therefore, the decision to recommend LTI treatment should be based on an evaluation of the risks associated with chemoprophylaxis and the risk of developing the disease. Some experts have suggested[10] that we are facing a dilemma: to treat more LTI to bring about a greater impact on the control of TB or focus our efforts on recently infected patients and groups of higher risk, where this strategy has clearly been shown to be cost effective.

Finaly treatments based on the use of rifamycin are currently the preferred option for treating LTI, since they are more effective than monotherapy with isoniazid, take less time and have higher rates of adherence[4]. Taken together, all these factors need to be reviewed in the Tuberculosis Prevention and Control Programme, which has been very useful for many years and has helped to control TB in prisons. However, it urgently requires an update 12 years after the third edition. That is why we congratulate Baca *et al.* for their work and support them in their request, which for the reasons given above, we now consider to be an important one.

Yours faithfully,

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