LETTERS TO THE EDITOR

Diagnostic approaches in tuberculous lymphadenitis

Abordagem diagnóstica na tuberculose ganglionar

To the Editor:

Lymphadenopathy is the most common form of extra-pulmonary tuberculosis (EPTB). Diagnosis of EPTB may not be easy, given the lack of specific presentation, the need for tissue sampling, the lack of accessible tissue, non-specific pathological findings and the relatively low microbiological yield.

The aim of our study was to review the diagnostic approaches to tuberculosis (TB) lymphadenitis. All TB lymphadenitis cases treated in an urban Chest Disease Center in Portugal, from 2003 to 2010, were reviewed. Patients were referred after diagnosis, either to start or continue treatment. They all had a positive response to anti-bacillary treatment.

Positive cytological/histological results were defined as findings of histological features compatible with TB (granulomatous inflammation and epithelioid cells with/without Langhans cells, caseous necrosis or positive Ziehl–Nielsen stain in lymph node (LN) samples). Positive microbiological results were defined as positive results on smear, culture or nucleic acid amplification test (NAAT).

We received 60 patients with TB lymphadenitis, 26 male and 34 female, with a mean age of 52.9 ± 20.8 years. They were all tested for human immunodeficiency virus (HIV) and 8 tested positive. Collection of LN tissue was performed through fine-needle-aspiration cytology (FNAC) in 34 (56.7%) and through excision in 24 (40%). For 2 patients there was no information.

A cytological/histological analysis was performed on 51/53 patients (there was no information on 7), which was positive for 50/51 (98%) (Fig. 1). A microbiological analysis was performed on 29/59 (no information on 1 patient), which was positive in 24 (82.8%). A positive smear was found in 14/29 (48.3%), positive culture in 19/28 (67.9%) and positive NAAT in 14/16 (87.5%) (Fig. 1). No differences were found between the microbiologically tested group and other patients, in terms of sex, age, HIV-infection, previous TB and recent TB contact. No differences in diagnostic yield were found between FNAC and excision.

It becomes clear that in the approach to lymphadenitis it is still not routine to send LN samples for both cytological/histological and microbiological analyses. Since the diagnostic process was not conducted in our center, it is not possible to exclude the presence of bias on the cohort that was microbiologically assessed, whether these patients had a higher suspicion for TB or not.

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Figure 1  Diagnostic approaches and results in all included TB lymphadenitis patients (n = 60) (left) and a venn-type diagram including only patients who performed all analyses (n = 13) (right).

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In this context, we would like to make a few points about pulmonary hypertension in dialysis patients. We read with great interest the nice article by Etemadi et al., and we agree with the conclusion that unexplained pulmonary hypertension seems to be more frequent in patients undergoing hemodialysis than with patients in the peritoneal dialysis group. In this context, I would like to make a few points about pulmonary hypertension in dialysis patients. In a study of 102 maintenance hemodialysis patients, we found pulmonary artery pressure of 41.5 ± 12.6 mmHg. In our study, 76.5% of hemodialysis patients had SPAP ≥ 35 mmHg. They concluded that unexplained pulmonary hypertension seems to be more frequent in patients undergoing hemodialysis than with patients in the peritoneal dialysis group. In this context, I would like to make a few points about pulmonary hypertension in dialysis patients. In a study of 102 maintenance hemodialysis patients, we found pulmonary artery pressure of 41.5 ± 12.6 mmHg. In our study, 76.5% of hemodialysis patients had SPAP ≥ 35 mmHg. In this study we can also see that pulmonary artery pressure had significant positive correlation with the duration and degree of hemodialysis. In another study we also observed that pulmonary artery pressure had significant positive correlation with serum intact parathormone. Pulmonary arterial hypertension is a serious cardiac complication among patients with end-stage kidney disease, especially patients on hemodialysis as mentioned in the study by Etemadi et al., and we need to look for other aggravating factors among dialysis patients. In order to achieve better understanding about this aspect of dialysis patients, more clinical studies are suggested.