

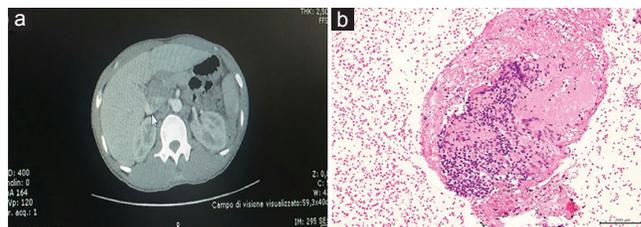
## Biopsy or Bio-Spy? The Role of Fine-Needle Aspiration Cytology in Pancreatic Tuberculosis

We have read the interesting paper recently published by Ali *et al.*, March, 8 volume, 1 issue, detailing a case of pancreatic mass in a 40-year-old male presenting with important weight loss, abdominal pain, and fever for 2 weeks. He denied any other complaint, history of tuberculosis, or drugs assumption.<sup>[1]</sup>

Recently, we have observed a comparable case of pancreatic tuberculosis which in our opinion deserves a short mention, given the rarity of such presentation and the entailed diagnostic clinical and pathologic challenges, especially when dealing with patients coming from endemic areas for tuberculosis.<sup>[1]</sup>

As Ali *et al.* properly stressed, despite the high prevalence of tuberculosis in developing countries, a preponderant or exclusive presentation as a pancreatic mass in advanced disease is rather uncommon and cases published in the pertinent literature are limited.<sup>[2,3]</sup>

We herein describe of a 30-year-old man from Ivory Coast who has been recently referred to our Hospital complaining of abdominal pain and lack of appetite; he was treated with imatinib for chronic myeloid leukemia about 1 year before. In addition, the past medical history was positive for pulmonary tuberculosis diagnosed and treated 7 years previously. On admission, physical examination was negative for enlarged superficial lymph nodes. He denied weight loss and did not present jaundice. Abdominal ultrasound revealed a slightly enlarged spleen, and computed tomography scan revealed a 1.6 cm solid mass within the pancreatic head [Figure 1a] along to enlarged lymph nodes at the hepatic hilum and celiac tripod. A chest X-ray evidenced pleural effusion. Serum level of carcinoembryonic antigen and CA19.9, as well as pancreatic hormones were negative and routine exams showed leukopenia. His QuantiFERON was positive, but the bronchoalveolar washing was negative. The clinical differential diagnoses favored either a pancreatic localization of chronic myeloid leukemia or a primitive pancreatic neoplasia; hence, a fine-needle aspiration cytology (FNAC) of the mass was performed. The aspirated material was examined by means of the cell-block technique, and microscopic examination of hematoxylin-eosin stained sections showed fibrinoid material, Langhans giant cells, and scattered inflammatory cells [Figure 1b]. Atypical epithelial cells were not recognized, so ductal carcinoma was reasonably excluded. All the other histochemical and immunohistochemical stains were negative. On the overall, the combined microscopic evidence were deemed consistent with pancreatic localization of tuberculosis, and after appropriate therapy, the patient does not report any relapse.



**Figure 1:** (a) Pancreatic mass at computed tomography scan, (b) fine-needle aspiration cytology: fibrinoid material, with Langhans giant cells (H and E,  $\times 40$ )

Although rarely diagnosed,<sup>[2,3]</sup> approximately 15%–20% of tuberculosis cases worldwide are extrapulmonary forms and patients may or may not have had active pulmonary disease or history of tuberculosis.

Along to the considerations addressed by Ali *et al.* in their index paper,<sup>[1]</sup> we emphasize once again that pancreatic tuberculosis should be considered in the differential diagnosis of a solid pancreatic mass, especially in patients with a history of tuberculosis or in subjects coming from geographic areas where tuberculosis is endemic. Instrumental guided FNAC or biopsy proven useful diagnostic tools especially either in oligo/asymptomatic<sup>[4]</sup> patients with nonspecific clinical features.<sup>[5]</sup>

### Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

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### Conflicts of interest

There are no conflicts of interest.

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