



ELSEVIER

Contents lists available at ScienceDirect

International Journal of Infectious Diseases

journal homepage: www.elsevier.com/locate/ijid

Medical Imagery

Tubercular splenic abscesses: A rare entity sometimes hard to sterilize



ARTICLE INFO

Article history:

Received 29 January 2019

Received in revised form 26 February 2019

Accepted 26 February 2019

Corresponding Editor: Eskild Petersen, Aarhus, Denmark

Keywords:

Tuberculosis

Splenectomy

Abscesses

A 25-year-old Moroccan female, not immunocompromised, presented a long history of disseminated susceptible tuberculosis. Initial standard regimen with 4 anti-tuberculosis and corticosteroids was initiated for a total duration of 9 months, allowing a partial clinical improvement. Despite good medication compliance, 6 months after treatment completion, she relapsed with pain in the left upper quadrant of the abdomen. Laboratory results showed a persistent lymphopenia of $700/\text{mm}^3$ with mild CRP = 60 mg/L. A PET/CT scan revealed a multi-focal tuberculosis, including pericardial and spleen localizations (Figure 1) which are uncommon (Gupta et al., 2006).

To attempt a conservative medical treatment (Kumar et al., 2018), a second line of treatment was initiated combining

moxifloxacin, rifampin, isoniazid without biological or clinical response. Indeed, contrast-enhanced tomodensitometry and Fat-saturated T2 with gadolinium MRI showed multiple small liquid collections, compatible with abscesses confirmed by a PET/CT scan (Figure 2) and three-dimensional CT reconstruction (Figure 3).

Spleen was considered as a reservoir of *M. tuberculosis* with a high inoculum. Considering clinical failure, a multidisciplinary meeting recommended splenectomy (Ray et al., 2012). Pathological examination revealed numerous abscesses and tuberculosis granulomas with necrosis (Figure 4). Culture returned negative despite a positive PCR to *M. tuberculosis* susceptible to Rifampin. After a 9-month follow-up, we observed a complete regression of

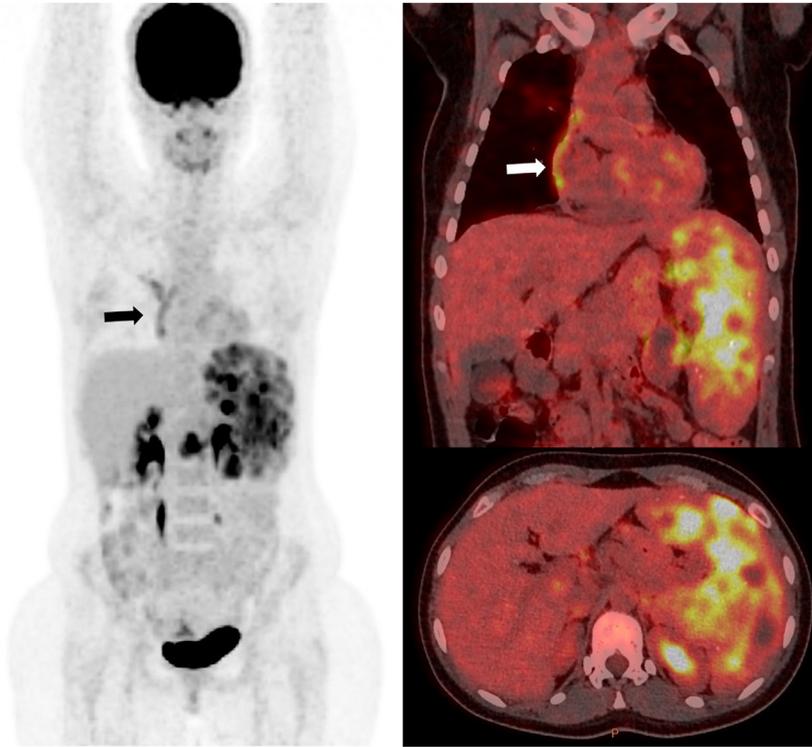


Figure 1. PET/CT scan with whole-body reconstruction (on the left side) showing a pericardial and spleen hypermetabolism.

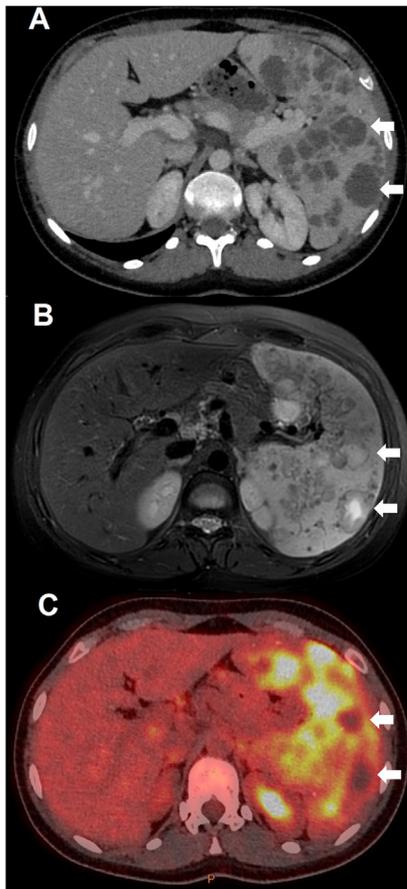


Figure 2. A. Contrast-enhanced tomography showing multiple collections. B. MRI Fat-saturated T2 with gadolinium confirming the abscessed nature of the collections. C. PET/CT scan shown as comparison.

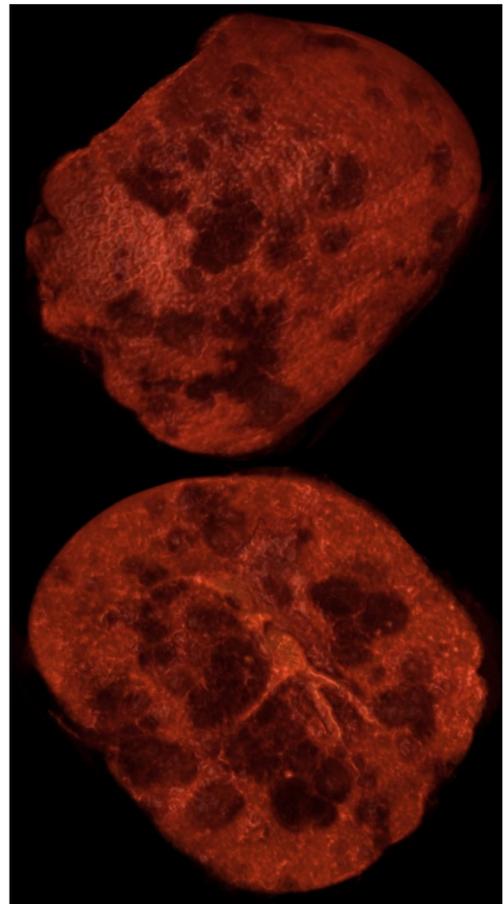


Figure 3. Three-dimensional CT reconstruction of the abdomen revealing splenomegaly with multiple splenic abscesses.



Figure 4. Pathological examination of the splenectomy showing tuberculosis necrosis with caseum.

symptoms and biological abnormalities (lymphocytes = 2350/mm³ and CRP < 1 mg/L).

Funding

No funding source.

Availability of data and materials

All material and data described in the manuscript are available upon request to the corresponding author of the present article.

Authors' contributions

BD and MM designed the report. TT and JFE managed the pictures part of the work. AA, CB, PF were in charge of the 2nd draft.

All the authors participated in manuscript preparation and approved the final manuscript for publications.

Competing interests

The authors declare that they have no competing interests.

Consent for publication

Written informed consent was obtained from the patient for publication of this case report.

A copy of the written consent is available for review by the Editor of this journal.

Ethics approval and consent to participate

Not applicable.

Acknowledgments

The authors would like to thank Dr. Pierre de Truchis for his unfailing support and his passion for travel medicine.

References

- Gupta A, Hunjan PS, Jain SK, Kaza RCM, Kumar V. Tubercular splenic abscess in an immunocompetent patient—a rare entity. *Southeast Asian J Trop Med Public Health* 2006;37:1196–8.
- Kumar A, Kapoor VK, Behari A, Verma S. Splenic tuberculosis in an immunocompetent patient can be managed conservatively: a case report. *Gastroenterol Rep* 2018;6:72–4.
- Ray S, Goswami M, Saha M, Kundu S, Sarkar D. Isolated tubercular splenic abscess: can we defer splenectomy? Our single experience with anti-tuberculous therapy alone. *Indian J Med Microbiol* 2012;30:101.

Morgan Matt^a

Christelle Blot^b

Tristan Thiry^c

Alice Antier^b

Frédérique Peschaud^b

Anne-Laure Roux^d

Jean-Francois Emile^e

Benjamin Davido^{a,*}

^aService de Maladies Infectieuses, Hôpital Raymond Poincaré, Garches, France

^bService de Chirurgie Digestive, Hôpital Ambroise Paré, Boulogne Billancourt, France

^cService de Radiologie, Hôpital Raymond Poincaré, Garches, France

^dService de Microbiologie, Hôpital Ambroise Paré, Boulogne Billancourt, France

^eService d'Anatomopathologie, Hôpital Ambroise Paré, Boulogne Billancourt, France

* Corresponding author at: Service de Maladies Infectieuses et Tropicales, Hôpital Raymond Poincaré, APHP, 104 Boulevard Raymond Poincaré, 92380 Garches, France.
E-mail address: benjamin.davido@aphp.fr (B. Davido).

Corresponding Editor: Eskild Petersen, Aarhus, Denmark

Received 29 January 2019

Received in revised form 26 February 2019

Accepted 26 February 2019