International Journal of Otorhinolaryngology and Head and Neck Surgery
Lame CA et al. Int J Otorhinolaryngol Head Neck Surg. 2020 Oct;6(10):1891-1893
http://www.ijorl.com
pISSN 2454-5929 | eISSN 2454-5937

DOI: http://dx.doi.org/10.18203/issn.2454-5929.ijohns20204195

Case Report

Tuberculous retropharyngeal abscess presenting as severe dyspnea

Cheikh Ahmedou Lame[1]*, Birame Loum[1], Cheikhna Ba Ndiaye[1], Sagar Diop[2], Moustapha Diop[3], Madjiguene Kone[4]

[1]ENT Department, Hospital Principal de Dakar, Senegal
[2]Neurosurgery Department, Hospital Principal de Dakar, Senegal
[3]Infectious Disease Department, Hospital Principal de Dakar, Senegal
[4]Anaesthesia and Reanimation Department, Hospital Principal de Dakar, Senegal

Received: 03 August 2020
Revised: 12 September 2020
Accepted: 15 September 2020

***Correspondence:**
Dr. Cheikh Ahmedou Lame,
E-mail: cheikhlame@gmail.com

ABSTRACT

Tuberculous retropharyngeal abscess is an exceptional condition, with high potential of functional morbidity and mortality if not treated appropriately. The authors report a new case of airway obstructive retropharyngeal abscess revealing cervical Pott disease. A 59 years old man presented at Ear, neck and throat (ENT) department with severe acute dyspnea. The history revealed progressive chronic dysphagia associated with asthenia and important weight loss. Physical examination found a state 3 dyspnoeic patient, presenting hyper flexed neck with limited movements. Nasofibroscopy showed a huge retropharyngeal bulge. Computed tomography (CT) scan showed a large retropharyngeal abscess located in front of vertebral spondylodiscitis with anterior dislocation of C4-C5-C6 vertebrae. Trans-oral incision with drainage of the retropharyngeal abscess was performed under general anaesthesia. Bacteriologic assessment of the pus confirmed tuberculosis infection. Anti-tuberculous medication was delivered, associated with spinal stabilization by a rigid cervical collar. Tuberculous retropharyngeal abscess is a very rare condition. Early diagnosis and treatment are necessary to prevent neurological and life-threatening complications. Collaboration between ENTs, anaesthetists, neurosurgeons and infectious disease specialists remains incontournable.

Keywords: ENT, Tuberculosis, Pott disease, Retropharyngeal abscess, Dyspnea

INTRODUCTION

Tuberculous retropharyngeal abscess is an exceptional condition.[1] The symptomatology is non-specific, and diagnosis remains difficult.[2] When misdiagnosed, it can lead to neurological or life-threatening complications.[2,3] The authors report a new case of airway obstructive retropharyngeal abscess revealing cervical Pott disease.

CASE REPORT

A 59 years old man, smoker, presented with recent worsening dyspnea and stridor. He reported history of dysphagia evolving since four months associated with posterior neck pain, left upper limb paresthesia, asthenia and progressive weight loss.

Physical examination on admission found a thin patient with stage 3 dyspnea, stiff neck with hyperflexion (Figure 1). There was no motor nor sensory neurological deficit.

Flexible fiberoptic endoscopy revealed a bulging mass originating from the retropharyngeal space, overhanging the larynx and coming into contact with the epiglottis (Figure 2).

Biological assessment objectified an inflammatory syndrome. Human immunodeficiency virus (HIV) test was negative.

Computed tomography (CT) scan showed a large retropharyngeal abscess, measuring 50.5×45.9 mm. Spondylodiscitis lesions were associated with vertebral dislocation involving C4, C5 and C6 vertebrae (Figure 3 and 4).

Figure 1: Stiff neck with hyperflexion.

Figure 2: Endoscopic view showing bulging of the retropharyngeal space in contact with epiglottic cartilage.

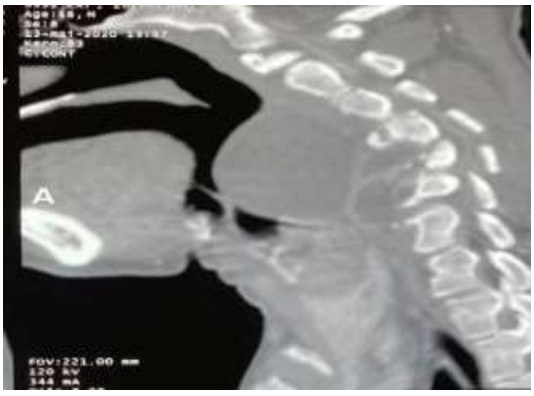

Figure 3: CT scan (sagittal view) showing retropharyngeal collection.

Surgical exploration was performed under general anesthesia, after fiberoptic-guided tracheal intubation. Per-oral incision of the retropharyngeal mass was made and 30 cc of puss aspirated.

Direct bacteriological assessment after Ziehl Nelsen staining on samples demonstrated positive results. GeneXpert test using Polymerase chain reaction (PCR) technique detected Mycobacterium tuberculosis.

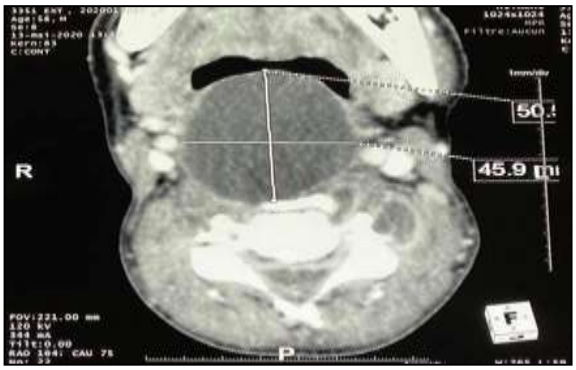

Figure 4: CT scan (transversal view) showing retropharyngeal collection.

Diagnosis of cervical Pott disease was retained. Anti-tuberculosis chemotherapy was initiated and wearing of a rigid cervical collar prescribed.

Infectious course was favorable and the patient referred to neurosurgeons for management of his cervical vertebral dislocation.

DISCUSSION

Tuberculous spondylodiscitis, or Pott disease, was first described in 1782 by Sir Percivall Pott.[4] Cervical spine localization is uncommon, representing 3 to 5% of vertebral locations in tuberculosis disease.[3-6] Presence of a perilesional abscess is classic, spreading to soft paravertebral tissues as a cold abscess in the retropharyngeal space.[3,4,6] However, airway obstructive retropharyngeal abscess is an exceptional and potentially life-threatening condition.[1-3]

The clinical picture is nonspecific. Dysphagia, dysphonia, dyspnea, neck pain, torticollis, and spinal deformities can reveal the disease.[2,7,8] Our patient was referred for severe dyspnea. Insidious to severe neurological deficit can be found, due to inflammatory irritation or cervico-medullary compression.[5,6,9]

Tuberculosis infectious symptoms, as night fever or sweats, asthenia and weight loss, are not always present.[2,5,7,8,10]

Lateral X-rays of the cervical spine can be a useful diagnostic tool by showing vertebral destruction.[2,8,10] CT scan demonstrates retropharyngeal abscess, destructive bone lesions of cervical vertebrae and disc involvement.[5,7,9] CT scan also precise spinal statics.[9] MRI

shows retropharyngeal abscess and improves analysis of neurological lesions.[5,9,10]

Bacteriological examination, Enzyme-linked immunosorbent assay (ELISA), and PCR confirm tuberculosis diagnosis.[5,7,9] Testing for HIV co-infection should be systematic.[2,7]

Cervical Pott disease management is based on medical medication. Anti-tubercular multidrug therapy for a sufficient duration is necessary.[4,5,7,9]

Surgical drainage of the abscess removes upper aerodigestive tract and cord compression.[4,5,9]

Immobilization by a cervical collar, external fixation or adjunctive surgery is necessary to prevent neurological complications.[4] The neurosurgical approach is indicated in cases of neurological involvement or medical treatment failure.[4,6,7]

CONCLUSION

Retropharyngeal abscess related to Pott disease is a very rare condition. Respiratory and neurological complications make it potentially dangerous. Adequate management requires perfect collaboration between anesthesiologists, ENT specialists, neurosurgeons and infectious disease specialists.

Funding: No funding sources
Conflict of interest: None declared
Ethical approval: Not required

REFERENCES

1. Hu X, Liu L. A huge retropharyngeal abscess causing airway and esophageal obstruction associated with cervical spine tuberculosis. Spine J. 2016;16(4):e227-9.
2. Hsu H-E, Chen C-Y. Tuberculous retropharyngeal abscess with Pott disease and tuberculous abscess of the chest wall: A case report. Medicine (Baltimore). 2019;98(27):e16280.
3. Hugar BS, Girish Chandra YP, Sreenivasa Babu PR, Jayanth SH, Vinay J. Fatal case of retropharyngeal abscess associated with Pott's disease. J Forensic Leg Med. 2013;20(6):567-9.
4. Rakotoson JL, Rakotomizao JR, Andrianarisoa AC. Volumineux abcès froid péripottique dorsolombaire [Huge dorsolumbar cold abscess associated with Pott's disease]. Rev Pneumol Clin. 2010;66(6):359-62.
5. Rachdi I, Fekih Y, Daoud F, Aydi Z, Ben Dhaou B, Boussema F. Cervical Pott's disease revealed by retropharyngeal abcess. Presse Médicale. 2018;47(10):918-21.
6. Benhammou A, Bencheikh R, Benbouzid MA, Boulaich M, Essakali L, Kzadri M. Abcès rétropharyngés révélant un mal de Pott cervical [Cervical Pott's disease revealed by retropharyngeal abscesses]. Rev Stomatol Chir Maxillofac. 2007;108(6):543-6.
7. Khanna K, Sabharwal S. Spinal tuberculosis: a comprehensive review for the modern spine surgeon. Spine J. 2019;19(11):1858-70.
8. Christoforidou A, Metallidis S, Kollaras P. Tuberculous retropharyngeal abscess as a cause of oropharyngeal dysphagia. Am J Otolaryngol. 2012;33(2):272-4.
9. El Abbassi SA, Talaoui M, Elamraoui F, Elouardi Z, Chikhaoui N. Mal de Pott sous-occipital: à propos d'un cas [Suboccipital Pott's disease: a case report]. J Radiol. 2009;90(1):63-5.
10. Diom ES, Ndiaye C, Djafarou AB. A case of cervical Pott's disease revealed by parapharyngeal abscess. Eur Ann Otorhinolaryngol Head Neck Dis. 2011;128(3):151-3.

Cite this article as: Lame CA, Loum B, Ndiaye CB, Diop S, Diop M, Madjiguene Kone M. Tuberculous retropharyngeal abscess presenting as severe dyspnea. Int J Otorhinolaryngol Head Neck Surg 2020;6:1891-3.