

person-to-person contact, including sexual contact. If sexual transmission of HAV is suspected, particularly among men-who-have-sex-with-men (MSM), PHI should be excluded. PHI presents clinically as a mononucleosis-like or flu-like syndrome, easily missed in the context of a concomitant acute hepatitis. HAV incubation period could potentially be shorter than serological evidence of HIV infection. HIV RNA become positive 7–10 days after HIV exposure, p24-antigen approximately 14 days and HIV antibodies at around 21 days.⁵ Thus, if concomitant or near exposure to HAV and HIV are suspected, HIV RNA should be requested to exclude PHI. HIV-VL is frequently extremely high in this period, with increased transmission risk. Complete seroconversion to HIV takes approximately 3 months until last WB band become positive (usually p31 band).

Sexually transmitted outbreaks of acute hepatitis A have been reported in the last years in Europe among MSM, particularly HIV-positive.^{6–9} Hepatitis A infection is not more severe among HIV-infected individuals, but HAV viraemia is higher and longer, increasing transmission risk. In high-income countries anti-HAV IgG in general population is usually low (<50% by the age of 30 years).¹⁰ Therefore, when HAV is introduced in groups at particular high-risk, as MSM population, outbreaks may occur, stressing the importance of preventive measures, particularly vaccination. As for HBV and HCV, HAV must also be considered as a potential co-infection in the context of PHI.

Conflict of interest

JA has received research funding from Gilead Sc and ViiV Health-care, out of the current work.

NAD: none to declare.

References

1. Romero A, González V, Granell M, Matas L, Esteve A, Martró E, et al. Recently acquired HIV infection in Spain (2003–2005): introduction of the serological testing algorithm for recent HIV seroconversion. *Sex Transm Infect.* 2009;**85**:106–10.

2. Le Vu S, Le Strat Y, Barin F, Pillonel J, Cazein F, Bousquet V, et al. Population-based HIV-1 incidence in France, 2003–08: a modelling analysis. *Lancet Infect Dis.* 2010;**10**:682–7.
3. EACS guidelines. Version 10.0; 2019.
4. Fisher M, Pao D, Brown AE, Sudarshi D, Gill ON, Cane P, et al. Determinants of HIV-1 transmission in men who have sex with men: a combined clinical, epidemiological and phylogenetic approach. *AIDS.* 2010;**24**:1739–47.
5. Fiebig EW, Wright DJ, Rawal BD, Garrett PE, Schumacher RT, Peddada L, et al. Dynamics of HIV viremia and antibody seroconversion in plasma donors: implications for diagnosis and staging of primary HIV infection. *AIDS.* 2003;**17**:1871–9.
6. Freidl GS, Sonder GJ, Bovée LP, Friesema IH, van Rijkvorsiels GG, Ruijs WL, et al. Hepatitis a outbreak among men who have sex with men (MSM) predominantly linked with the EuroPride, the Netherlands, July 2016 to February 2017. *Eurosurveillance.* 2017;**22**:1–5.
7. Comelli A, Izzo I, Casari S, Spinetti A, Bergamasco A, Castelli F. Hepatitis a outbreak in men who have sex with men (MSM) in Brescia (Northern Italy), July 2016–July 2017. *Infez Med.* 2018;**26**:46–51.
8. Charre C, Ramiere C, Roque-Afonso AM, Chidiac C, Zoulim F, Godinot M, et al. Hepatitis a outbreak in HIV-infected MSM and in PrEP-using MSM despite a high level of immunity, Lyon, France, January to June 2017. *Eurosurveillance.* 2017;**22**:1–4.
9. Beebejaun K, Degala S, Balogun K, Simms I, Woodhall SC, Heinsbroek E, et al. Outbreak of hepatitis A associated with men who have sex with men (MSM), England, July 2016 to January 2017. *Eurosurveillance.* 2017;**22**:1–6.
10. Carrillo-Santistevan P, Tavoschi L, Severi E, Bonfigli S, Edelstein M, Byström E, et al. Seroprevalence and susceptibility to hepatitis A in the European Union and European Economic Area: a systematic review. *Lancet Infect Dis.* 2017;**17**:e306–19.

Natalia Anahí Díaz^{a,b}, Juan Ambrosioni^{b,*}

^a *Infectious Diseases Service, Hospital Cesar Milstein, Buenos Aires, Argentina*

^b *Infectious Diseases Service, Hospital Clinic-IDIPABS, Barcelona, Spain*

* Corresponding author.

E-mail address: AMBROSIONI@clinic.cat (J. Ambrosioni).

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***Mycobacterium lentiflavum*. Pulmonary infection in an immunocompetent patient[☆]**



***Mycobacterium lentiflavum*. Infección pulmonar en una paciente inmunocompetente**

Mycobacterium lentiflavum is considered as a slow-growing non-tuberculous mycobacterium (NTM). It was first described as a new species in 1996.¹

We present the case of a 56-year-old woman, a former smoker with a five-pack-year history who had stopped 15 years previously, with no relevant medical history. She went to the Accident and Emergency department with haemoptysis, with an expectorated volume of up to 150 mL in 10 h. In view of her symptoms, she was given an emergency bronchoscopy, in which two blood clots were detected (in the right upper and lower lobes). Three days later, a second bronchoscopy was performed to complete the examination. The patient subsequently had a chest computed tomography (CT) scan, which showed bronchiectasis, nodular-looking images, discrete peribronchial ground-glass areas (likely related to recent bleeding), and hilar lymphadenopathy in the pathological range.

Three respiratory samples were taken (two bronchial aspirate obtained from the two different bronchoscopies and one sputum) and sent to the Microbiology laboratory, where microscopic examination was performed and they were cultured in solid medium (Coletsos) at 35 °C, and in liquid medium, using an automatic incubation and detection system: BACTEC MGIT 960 system (Becton Dickinson, Maryland, USA). In the auramine staining, acid-alcohol-fast bacilli were observed in all the samples. However, no *Mycobacterium tuberculosis* complex-specific DNA was detected by the commercial real-time PCR technique (BD MAX MDR-TB, BD New Jersey, USA) in any of the samples. While in hospital, the patient was started on empirical treatment with ceftriaxone and, in view of her adequate clinical progress, she was discharged to continue investigations as an outpatient. Identification of mycobacteria was still pending.

At two and a half months, the chest CT scan was repeated, showing persistence of bronchiectasis, nodular images and lymphadenopathy with disappearance of the discrete ground-glass areas (Fig. 1). The patient's respiratory function tests, autoimmunity tests and coagulation were all normal.

After two months of incubation, mycobacteria grew in the three respiratory samples, identified as *M. lentiflavum* by the strip-based reverse hybridisation and amplification method (GenoType[®] Mycobacterium AS [Hain Lifescience, Nehren, Germany]). As other aetiologies had been ruled out and the patient fulfilled clinical, radiological and microbiological criteria compatible with infec-

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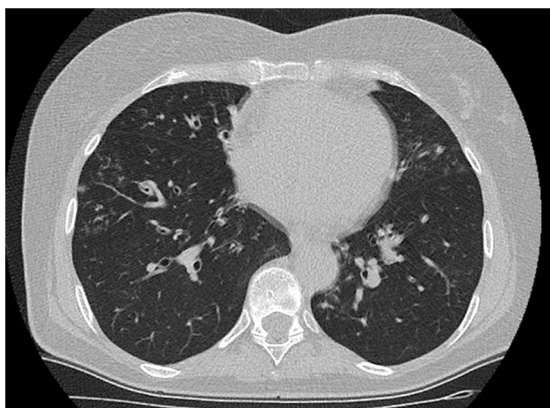


Fig. 1. CT section showing bronchiectasis and predominantly peripheral nodular images in the right lower lobe.

tion by *M. lentiflavum*,² it was decided to start treatment with azithromycin, ethambutol and rifampin, with adequate initial tolerance. A month after starting treatment, the first control sputum was performed, which was negative for mycobacteria.

The patient has now completed eight months of treatment with no new episodes of respiratory infection and no medication side effects.

M. lentiflavum is a slow growing, scotochromogenic NTM, found mainly in soil and water, and it can cause infection in humans. It has a coccobacillary shape and in culture the colonies are small and pale yellow.

In childhood, it is the main cause of cervical lymphadenitis, while in adulthood it is associated with lung infection or disseminated disease in immunosuppressed patients. Some authors have described it as the third most common NTM in patients with cystic fibrosis.³ The most extensive review of cases published to date of respiratory infection by this NTM has 16 patients not infected with the immunodeficiency virus, and the majority are older women who are not showing an aggressive clinical course.⁴

This infection is described as being predominant in women with a mean age of 60, similar to the age of the patient we present here. It is usually benign; however, there is a published case of necrotising pneumonia with parapneumonic pleural effusion in an immunocompetent patient.⁵ Radiologically, it tends to present as bronchiectasis, nodules, or with a tree-in-bud pattern, and it has been described as a causal agent for super-infection of pre-existing bronchiectasis.⁶

From a therapeutic point of view, given the low prevalence of this infection, there are no standardised guidelines in the various

official guidelines which cover the management of NTM infections. However, it is described as a mycobacterium with high resistance to the usual antibiotics.

According to the review consulted, the case we present here seems to be the first lung disease caused by *M. lentiflavum* to be described in Spain in a patient who was an immunocompetent patient and had no previous medical history of respiratory disease. It is very often difficult to determine the clinical significance of the isolates due to this mycobacterium. It is, nevertheless, a microorganism that needs to be taken into account and not be systematically considered as a contaminant, even in patients with no associated comorbidity.

Conflicts of interest

All the authors declare that they have no conflicts of interest directly or indirectly related to the contents of the manuscript.

References

1. Tortoli E, Bartoloni A, Erba ML, Levrè E, Lombardi N, Mantella A, et al. Human infections due to *Mycobacterium lentiflavum*. *J Clin Microbiol.* 2002;40:728–9.
2. Griffith DE, Aksamit T, Brown-Elliott BA, Catanzaro A, Daley C, Gordin F, et al. An official ATS/IDSA statement: diagnosis, treatment, and prevention of nontuberculous mycobacterial diseases. *Am J Respir Crit Care Med.* 2007;175:367–416.
3. Phelippeau M, Dubus JC, Reynaud-Gaubert M, Gomez C, Stremmler le Bel N, Bedotto M, et al. Prevalence of *Mycobacterium lentiflavum* in cystic fibrosis patients. *BMC Pulm Med.* 2015;26:131.
4. Yagi K, Morimoto K, Ishii M, Namkoong H, Okamori S, Asakura T, et al. Clinical characteristics of pulmonary *Mycobacterium lentiflavum* disease in adult patients. *Int J Infect Dis.* 2018;67:65–9.
5. Lee YC, Kim SB, Gang SJ, Park SY, Kim SBR. Acute necrotizing pneumonia combined with parapneumonic effusion caused by *Mycobacterium lentiflavum*: a case report. *BMC Infect Dis.* 2015;19:15–354.
6. Ford ES, Horne DJ, Shah JA, Wallis CK, Fang FC, Hawn TR. Species-specific risk factors, treatment decisions, and clinical outcomes for laboratory isolates of less common nontuberculous mycobacteria in Washington state. *Ann Am Thorac Soc.* 2017;14:1129–38.

Cristina Matesanz-López^{a,*}, Cristina Loras-Gallego^b, Juana Begoña Cacho-Calvo^b, María Teresa Río-Ramírez^a

^a Servicio de Neumología, Hospital Universitario de Getafe, Getafe, Madrid, Spain

^b Servicio de Microbiología, Hospital Universitario de Getafe, Getafe, Madrid, Spain

* Corresponding author.

E-mail address: cristinamatesanz@hotmail.es (C. Matesanz-López).

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Antimicrobial susceptibility study of *Neisseria gonorrhoeae* in the health area of the University and Polytechnic La Fe Hospital of Valencia[☆]



Estudio de sensibilidad antimicrobiana de *Neisseria gonorrhoeae* en el área de salud del Hospital Universitario y Politécnico La Fe de Valencia

Since the advent of sulfonamides for the treatment of gonococcal infection in the 1930s, *Neisseria gonorrhoeae* has developed resistance to all the antibiotics used. The worldwide increase in

gonorrhoea cases, as well as resistance to first-line drugs, make *N. gonorrhoeae* one of the top three urgent antibiotic-resistance threats for which optional treatments are needed.¹ As alternatives to the current therapy, known antibiotics such as gentamicin and gemifloxacin are being tested,^{2–4} in addition to new drugs, all in different stages of development, such as solithromycin, zoliflodacin and gepotidacin.

With the aim of providing new information on the rate of resistance of *N. gonorrhoeae* to gentamicin and other antibiotics, we studied the antimicrobial susceptibility of all the strains isolated from the samples received at the Microbiology Department of Hospital Universitario i Politécnico La Fe, from March 2013 to March 2019.

The samples were seeded in chocolate agar (bioMérieux) and in Martin Lewis selective medium (Becton Dickinson). Isolated strains

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