

MEASLES - AN ENT DIAGNOSIS?

Tiago Lourenço Coelho¹, Nuno Silva², Hugo Figueiredo¹, and Ricardo Caiado¹

¹CHUC

²Centro Hospitalar e Universitario de Coimbra EPE

September 21, 2023

MEASLES - AN ENT DIAGNOSIS?

Tiago Lourenço Coelho¹, Nuno Dias Silva¹, Hugo Figueiredo¹, Ricardo Caiado¹

¹ *Department of Otorhinolaryngology, Centro Hospitalar e Universitário de Coimbra, Portugal*

Corresponding Author

Full name: Tiago Manuel Lourenço Gaspar Coelho

Department: Serviço de Otorrinolaringologia

Institute/University/Hospital: Centro Hospitalar e Universitário de Coimbra

Street Name & Number: Praceta, R. Prof. Mota Pinto

Postal code, City, State, Country: 3004-561 Coimbra, Portugal

Tel: +351 964568338

E-mail: tlourenco.coelho@gmail.com

Funding Sources: The authors declare that there are no sources of financing.

Disclosure Statement: The authors declare that they have no conflicts of interest related to this work.

Data Availability Statement: Data sharing not applicable – no new data generated.

Informed Consent Statement: Written informed consent was obtained from the patient to publish this report in accordance with the journal's patient consent policy.

Ethics Statement: The authors declare that the procedures were followed according to the regulations established by the 2013 Helsinki Declaration of the World Medical Association. The authors declare having followed the protocols in use at their working center regarding patients' data publication.

Key Clinical Message:

ENTs should remain vigilant about the emergence of measles in non-endemic countries.

Clinical suspicion is crucial in identifying this disease, with Koplik's spots being a pathognomonic sign. Forming part of the differential diagnosis and helping to prevent potential outbreaks.

MEASLES - AN ENT DIAGNOSIS?

Tiago Lourenço Coelho¹, Nuno Dias Silva¹, Hugo Figueiredo¹, Ricardo Caiado¹

Measles is a severe viral infection characterized by fever, cough, runny nose, conjunctivitis, and a distinctive rash. It spreads through respiratory droplets and can lead to complications like pneumonia and encephalitis [1-3]. Despite the availability of measles vaccines, outbreaks still occur due to vaccine hesitancy and incomplete immunization coverage [2].

A 42-year-old Caucasian man with no significant medical history, presented to the emergency room with fever, cough, odynophagia and a skin rash with 3 days of evolution, 10 days after returning from Brazil.

On admission, the tympanic temperature was 39.2°C. Physical examination revealed a cephalocaudal maculopapular rash that spread across his face, chest, and extremities (Figures 1 and 2), and multiple 1–2 mm grey–white spots on the buccal mucosa consistent with Koplik’s spots (Figure 3).

Measles was suspected based on the associated symptomatology and Koplik’s pathognomonic sign, and he was placed in isolation.

Oropharyngeal swab, urine and blood specimens were taken. The diagnosis was confirmed by positive polymerase chain reaction (PCR) for measles. Serological tests using enzyme immunoassay were also performed revealing IgM antibodies against measles (IgM titer 8.4, positive [?] 1.1; IgG titer 9.0; positive [?] 16.5), compatible with acute infection.

He received supportive care and within a few weeks all his symptoms disappeared.

There is an increase in new cases of measles in developed countries where vaccination is optional. This case demonstrates the importance of continuing to include measles in the differential diagnosis, even in countries where this disease has been eliminated, since cases can arise in other countries and easily cause outbreaks.

The role of the otorhinolaryngologist as a public health agent is reinforced preventing transmission and implement control measures. Attention should also be drawn to the need for measles vaccination for all health care providers.

REFERENCES

- [1] Rima B, Collins P, Easton A, et al. ICTV Virus Taxonomy Profile: Paramyxoviridae. J Gen Virol. 2018;99(6):782-783.
- [2] Goodson JL, Seward JF. Measles 50 years after use of measles vaccine. Infect Dis Clin North Am. 2015;29(4):725-743.
- [3] Moss WJ. Measles. Lancet. 2017;390(10111):2490-2502.

Figure 1: Cephalocaudal maculopapular rash in the chest and extremities.

Figure 2: Cephalocaudal maculopapular rash in the dorsal region.

Figure 3: Koplik’s spots on the buccal mucosa.





