## A Peculiar Case of Adult onset Measles

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#### **Abstract**

Measles, commonly perceived as a childhood illness, presents a unique challenge when encountered in adults. This abstract delves into measles in an adult patient, highlighting the clinical observations, diagnostic intricacies, and the extended course of the disease. Furthermore, it examines the prolonged and complex clinical course experienced by the patient, emphasizing the importance of vigilance and comprehensive management strategies in such cases. This abstract aims to contribute to a broader understanding of measles epidemiology, particularly in adult population and underscores the necessity for heightened awareness and timely intervention in managing this infectious disease.

Keywords: Measles; Koplik's Spots; Rashes.

## INTRODUCTION

Despite significant strides in vaccination efforts, measles remains a public health concern globally. While typically associated with childhood infections, the occurrence of measles in adults is infrequent and can pose diagnostic challenges due to atypical presentations. We present a rare case of measles in an adult, highlighting the importance of vigilance in recognizing and managing this infectious disease in non-traditional demographics. Through this case report, the aim is to contribute to the expanding knowledge base surrounding a distinctive case of a 28-year-old female exhibiting typical measles symptoms, diagnosed through

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antibody titration. This paper examines the clinical manifestations, diagnostic intricacies, and the prolonged course of the disease.

# CASE

A healthy 28-year-old female sought medical attention with a perplexing measles of symptoms. Her chief complaints included high fever, severe malaise, photophobia, cough, coryza, and a diffuse erythematous rash that appeared on the face and progressively extended to the trunk and limbs. Strikingly, the patient's history indicated childhood measles vaccination, making the diagnosis even more challenging.

Clinical examination: It unveiled the presence of Koplik's spots on the buccal mucosa, reinforcing the suspicion of measles. With a provisional diagnosis in place, immediate isolation measures were implemented to prevent potential transmission.

Laboratory Confirmation: To confirm the diagnosis definitively, serological testing was undertaken, measuring measles specific IgM antibody titers. Results returned with a markedly elevated IgM antibody titer value of 3, unequivocally indicating recent measles infection.

Concurrently, the patient's IgG antibodies correlated with her prior vaccination history.



Fig 1: Koplik's Spots and Diffuse Erythematous Rash

Management: The management plan included a combination of medications aimed at alleviating symptoms and addressing potential complications. Diclogesic, Ebastine, and Phenylephrine Hydrochloride Tablets helped manage fever, inflammation, and nasal congestion, Benzoxonium Chloride & Lidocaine Hydrochloride Chewable Tablets provided relief has throat Additionally, Chlorpheniramine discomfort. Maleate and Dextromethorphan Hydrobromide syrup helped alleviate cough and allergy symptoms. Alongside symptomatic treatment, the patient was prescribed Faropenem sodium tablets, an antibiotic, to prevent or treat bacterial infections that could have occurred as a complication of measles. This comprehensive approach aimed to mitigate discomfort, reduce complications, and support the patient's recovery from measles.

**Disease Course:** The measles infection in this patient followed an extended course, spanning 14 days. The rash, a hallmark symptom of measles, persisted for an unusually prolonged duration of ten days.

## **DISCUSSION**

The article 'Adult measles- Case reports of a highly contagious disease' by Koch *et al.* (2019) provides a detailed examination of adult measles cases, underscoring the high contagion and serious outcomes associated with the disease, even in vaccinated individuals. They reported two adult cases-one involving a 40-year old male and a 55-year old female-who exhibited classical

measles symptoms, including fever, cough, and maculopapular rash. Diagnostic confirmation was achieved through IgM antibody testing and PCR. Notably, the older patient developed acute encephalopathy post-recovery, highlighting potential severe complications.

In contrast, this case report describes a single adult patient, a 28-year-old female, with measles despite prior vaccination. The diagnosis was similarly confirmed through elevated IgM antibody titers, and the clinical presentation included fever, rash, and Koplik's spots. However, the course of the disease in this case extended over 14 days with a persistent rash lasting ten days. Unlike the cases reported by Koch *et al.*, this patient did not develop severe complications but required a multi-faceted management approach for symptom relief and infection prevention.

While Koch *et al.* emphasize the importance of early diagnosis and isolation to prevent outbreaks, this case underscores the need for awareness of measles in vaccinated adults, particularly regarding the potential for prolonged disease duration. Both reports stress the critical role of serological testing in confirming measles and managing it effectively.

## CONCLUSION

This atypical case of measles in a previously vaccinated adult highlights the significance of recognizing measles in adults, irrespective of their vaccination history. Timely diagnosis, isolation, and vigilant management are pivotal not only for individual patient care but also for preventing potential transmission within the community. Furthermore, this case prompts healthcare providers to acknowledge the possibility of a prolonged course of measles, particularly regarding rash persistence, even in adult patients. It emphasizes the role of serological testing as an essential tool in diagnosing rare cases of infectious diseases like measles in non-typical clinical scenarios

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