

H1N1 with Measles, an Unusual Combination: A Case Report

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Abstract

Seven and a half months old male infant presented to emergency with chief complaints of fever from 6 days cough since 6 days, rash since 3 days. In view of increasing respiratory distress, H1N1 PCR was sent which came positive. As it was unusual presentation of H1N1, to rule out other viral illnesses rubella and measles serology was sent of which Measles serology came strongly positive. To our knowledge this is the first case report of H1N1 and measles presenting simultaneously in same patient.

Keywords: H1N1, Measles, Rash.

Introduction

Infections can occur in combinations. During change of climate there may be more than one organisms in environment. Missing or not suspecting may be life threatening. This case report shows a rare combination of H1N1 infection and measles. High index of suspicion was life saving.

Case Report

A developmentally normal and immunized for age as per UIP, 7.5-month-old male infant presented to emergency with chief complaints of fever from 6 days cough since 6 days, rash since 3 days. On detailed history, fever was moderate to high grade,

rash started from face and then involved whole body over a period of 2 days. It was maculopapular rash. On examination child had mild tachypnoea with respiratory rate of 56/min, rest vitals were stable. On further examination child had significant lymphadenopathy including single suboccipital lymph node with size of 1.5 cm with bilateral cervical lymph nodes with inguinal lymph node. Child also had bilateral purulent conjunctivitis.

With above complaints child was admitted in ward but shifted to PICU on day 2, in view of increasing respiratory distress. Child was put on noninvasive ventilation, oseltamivir was started and H1N1 PCR was sent which came positive, child isolated. Child required NIV for 2 days after which oxygen for 1 day. Oseltamivir given for 5 days at dose of 3 mg/kg/dose bd. Rash faded in 5 days, child became afebrile in 3 days of starting oseltamivir.

Complete blood count showed Hb-10 gm/dl, TLC-6600/mm³ with Polymorphs 38% and lymphocytes 56%. Peripheral smear showed activated lymphocytes. Paul bunnell test to r/o infectious mononucleosis was negative.

As it was unusual presentation of H1N1, to rule out other viral illnesses rubella and measles serology was sent of which measles serology came strongly positive. Blood culture came sterile. vitamin A course completed.



Fig. 1a:



Fig. 1b:

Fig. 1a, 1b: Showing image of index patient having maculopapular rash.

Discussion

Typical clinical characteristics of pandemic (H1N1) influenza are reported to include fever, cough, other upper respiratory tract symptoms, diarrhea and vomiting.^{1,2} Rash occurs in about 2% of patients with influenza A,^{3,4} and it is also described in cases with pandemic A (H1N1) influenza.^{5,6} In one of the previous studies rash was encountered in 552(9.6%) of hospitalized children, aged 3 months to 13 years, with confirmed, by RT-PCR, pandemic influenza A (H1N1).⁷

To our knowledge this is the first case report of H1N1 and measles presenting simultaneously in same patient. Clinical features of patient were consistent with measles but swine flu was suspected in view of current epidemic in India. Index case responded to oseltamivir on the front of pneumonia.

Nevertheless, we would like to draw attention that rash should be pursued in children with symptoms of influenza, as it represents an uncommon but existing feature of pandemic A (H1N1) influenza, at least in childhood population. Vigilance is necessary for the timely diagnosis of pandemic (H1N1) influenza. Although rash is an uncommon manifestation of influenza, a high index of suspicion must be maintained for patients who have rash and symptoms consistent with influenza-type infection. During a pandemic, unusual presentations of the pandemic illness remain more common than the usual presentations of rare illnesses.

Conclusion

During the season of viral illnesses a high index of suspicion should be kept for association of two viral illnesses. Patient may get the benefit of this out of box thinking. In the present case if measles was missed, patient would have missed dose of vit A. If H1N1 was missed he might have died as local lung immunity is very low in measles. He was saved as he received oseltamivir.

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