

PNEUMOMEDIASTINUM AND SUBCUTANEOUS EMPHYSEMA AS MEASLES COMPLICATIONS: A CASE REPORT

A.I. Ibrahim¹, A.V. Valori², M. Tamannai², E.M. Aderie¹, Y.A. Isak³, M.I. Ali³, A. Ahmed³, A.A. Nor³, A.A. Abdullahi¹, S. Mohammed³

¹Médecins Sans Frontières, OCBA, Baidoa, Somalia, ²Médecins Sans Frontières, OCBA, Barcelona, Spain, ³Bay Regional Hospital, Baidoa, Somalia

Abstract language: English

Topic: General paediatrics

Introduction: Measles is a highly contagious viral infection preventable by vaccination. It can be a serious health problem and is one of Somalia's public health concerns, with a vaccination coverage of 23% according to the Somali Health and Demographic Survey (SHDS, 2020). Common complications of measles include diarrhoea and respiratory complications such as otitis and pneumonia. We report a case of measles complicated by subcutaneous emphysema and pneumomediastinum seen in our hospital.

Case description: An 8-year-old boy diagnosed with measles presented to hospital with fever, respiratory distress (tachypnoea: respiratory rate 65/min, intercostal retractions, bilateral crepitations on auscultation, oxygen saturation in room air 94%), neck swelling and eyelid oedema a week after the appearance of the skin rash. The swelling progressed, involving the face, upper limbs, chest and scrotum. Subcutaneous crepitations were felt on palpation (*Figure 1*) and chest X-ray showed extensive subcutaneous emphysema and signs of pneumomediastinum (*Figure 2*). He had no signs of malnutrition. He was not vaccinated against measles and two siblings were diagnosed with measles during his admission.

The patient received percutaneous catheterisation in the Emergency Room and was hospitalised with supplemental oxygen (increasing saturations to 100%) plus ampicillin 150 mg/kg/day and cloxacillin 200 mg/kg/day for 2 weeks. He improved progressively and was discharged on day 14 after admission.



Figure 1



Figure 2

Discussion: We report a case of measles with subcutaneous emphysema successfully treated in the Paediatric Ward. Over a period of three months, 80 cases of measles were treated at our hospital. Only this case deteriorated with bronchopneumonia and persistent cough, and eventually pneumomediastinum and subcutaneous emphysema. These are rare complications of measles, commonly associated with malnutrition and age under 5 years old, neither of which was the case for our patient. During outbreaks, in low coverage vaccination areas, rare complications of measles should still be considered.

This study is: Meets the exemption criteria for ERB review. It was conducted with permission from:

Details: MSF OCBA Medical Director

1. I confirm that the abstract and that all information is correct: Yes

2. I confirm that the abstract constitutes consent to publication: Yes

3. I confirm that I submit this abstract on behalf of all authors: Yes

4. Selected for either oral or poster presentation.: Yes

Conflict of interest to declare?: No