Measles epidemic with complications in Bosnian children during 2008- Prevention strategy

A. Bajraktarevic

Public Health Institution of Canton Sarajevo, Sarajevo, Bosnia and Herzegovina

Background: Morbilli is a childhood viral disease manifested as acute febrile illness associated with cough, coryza, conjunctivitis, spots on the buccal mucosa, and rash starting on the head and neck and spreading to the rest of the body. Treatment for mild cases of measles is supportive.

Aim: The objective of this review was to assess the effects of antibiotics given to children with measles in reducing pneumonia, other morbidities and mortality during epidemiological infections unvaccinated children during last epidemic 2008 in Bosnia and Herzegovina.

Methods: Randomized controlled trials (RCTs) and quasi-RCTs comparing antibiotics with placebo or no treatment to prevent complications in children with measles. Diagnosis was usually clinical, by identifying Koplik’s spots or the rash. Alternatively, laboratory diagnosis of measles had done with confirmation of positive measles IgM antibodies or isolation of measles virus RNA from respiratory specimens.

Results: Bronchopneumonia occurred in up to 10% cases producing serious respiratory difficulties in Bosnian epidemic 2008. Severe cases of measles required hospitalisation in 16% cases of kids measles infection. Low rate of complications had a group of kids patients that received antibiotics prophylaxis (6%) compared with group of sick kids without antibiotics (21%). Gypsies children had significantly lower immunization coverage (37%), compared with other Bosnian local groups (89%) that time period.

Discussion: Antibiotics may be given to treat secondary bacterial infections from complications such as otitis media, infectious diarrhoea, pneumonia and sepsis. Despite this, measles remains a leading cause of vaccine preventable death worldwide.

Conclusion: There is no specific treatment for measles which is why immunisation is so important. These results show that a significant number of kids patients with measles develop complications and require admissions. The majority of patients are nine months to five years old. Combined measles, mumps and rubella (MMR) vaccine is currently part of routine immunisation programmes in most countries, including Bosnia and Herzegovina.

References:

1. Public Health Agency of Canada, Winnipeg, MN, Canada
2. World Health Organization, Geneva, Switzerland
3. IHRC, Inc, Atlanta, GA, USA