Recent measles outbreak in childhood population in Western Attica

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Background and aims

The spread of measles across Europe has recently reached Greece, which is now facing an ongoing epidemic, the first since the outbreak of 2009-2010. With the present study we aim to present the main epidemiological features of the current outbreak among children in our region, since the beginning of the epidemic in June 2017.

Methods

- Retrospective study, between 1 June 2017- 31 January 2018
- Reviewed files of out- and inpatients with probable, possible or confirmed measles, managed at the Paediatric Department of our hospital, which serves a large population of Western Attica.
- Classification criteria:
Confirmed=Laboratory confirmed cases
Probable=Cases meeting the clinical criteria with an epidemiological link
Possible=Cases meeting the clinical criteria
- Features recorded:
 - ✓ Nationality
 - ✓ Age
 - ✓ Vaccination status
 - ✓ Cause of admission
 - ✓ Diagnosis (clinical, serology, molecular methods)
 - ✓ Complications in the course of the disease
- Descriptive analysis of results

Results

- 70 cases with probable or confirmed measles.
- 62/70 (89%) were Greek Roma children (fig 1).
- Distribution according to age range was:
 - < 12 months old: 5/70 (7%)
 - 1-4 years old: 39/70 (56%)
 - 5-11 years old: 21/70 (30%)
 - 12-16 years old: 5/70 (7%)
- Vaccination profile as follows:
 - ✓ Completely unvaccinated children: 67/70 (96%).
 - ✓ Partially immunized children (1 dose of MMR): 3/70 (4%).
- 53/70 (72%) were hospitalized due to unrecessive fever (75%), reduced feeding (66%), respiratory distress (6%) and febrile seizures (3%).
- 23/53 (43%) of inpatients had complications in the course of the disease (fig. 2). No death was recorded.
- 12/70 (17%) of cases were laboratory confirmed (serology and/or PCR of pharyngeal swab).
- 58/70 (83%) of cases were clinically diagnosed (typical features and contact history).

Discussion

Measles, although a vaccine preventable disease, is still a major cause of morbidity in populations with suboptimal vaccination coverage such as Roma communities. Vaccination strategies in this susceptible population are imperative.