Main points

- The notification rate of hepatitis A is quite stable and has declined in recent years.
- Based on the data for the period 2004-2011:
  - The disease was more frequent among children younger than 14 years old.
  - 31.1% of the notified cases belonged to the Roma ethnic group.
  - Gender and age distribution differed between the Roma and the general population.

Hepatitis A is an acute, self-limited disease of the liver, which is caused by the hepatitis A virus (HAV). HAV has been classified as a member of the Picornaviridae family [1,2]. In Greece, hepatitis A is a mandatory notifiable disease.

Time trend *

During the period 2004-2011, 921 cases of hepatitis A were reported. The median number of reported cases per year was 115 (SD: 79). The mean annual notification rate was 1.03 cases per 100,000 population. The number of reported cases per year along with the annual notification rate for the period 2004-2011 are presented in Table 1. The temporal distribution of hepatitis A notification rate for the same period is depicted in Graph 1. The notification rate has decreased during the last four years.

* The presented data concern the period 2004-2011, as Mandatory Notification System was reorganized in 2004.
Age and gender distribution

For the 2004-2011 period, the highest notification rate of the disease was recorded for children under 14 years of age (Graph 2). The mean annual notification rate was 3.4 and 3.3 cases per 100,000 population in the age groups of 0-4 and 5-14 years old, respectively. No significant difference was noted in the disease’s gender distribution (57.3% of the reported cases were male).

Geographical distribution

The mean annual notification rate for the period 2004-2011, by geographical region, is depicted in Figure 1. The geographical area of Eastern Macedonia-Thrace had the highest mean annual notification rate (4.2 cases per 100,000 population) and Western Macedonia the lowest (0.2 cases per 100,000 population).

Seasonal distribution

The mean monthly notification rate for the period 2004-2011 is depicted in Graph 3. Reported cases of hepatitis A were unevenly distributed during the year presenting a marked seasonality with the highest number reported during winter.

Risk factors

For the 2004-2011 period, 250 (27.7%) of the notified cases of hepatitis A reported the presence of another person with similar symptoms among their contacts. Eighty eight (9.9%) of the reported cases had travelled abroad within the incubation period of the disease. Thirty one cases reported that they had been vaccinated against hepatitis A. Among the 22 cases, for which the respective information was available, twenty (90.9%) were vaccinated with a single dose and two (9.1%) reported they had been vaccinated with both doses of the vaccine. Two hundred and seventy one (31.1%) of the reported cases were Roma. Regarding the age distribution, 93.7% of Roma cases were children < 15 years old, while in the rest of the population, only 23.4% belonged to this age group (Graph 4).

Conclusion

The mean annual notification rate of hepatitis A in Greece is low. According to the latest reported data of the European Centre for Disease Prevention and Control, the mean notification rate reported by the EU and EEA/EFTA countries was 3.4 cases per 100,000 population for the year 2009 [3]. When interpreting this difference, the surveillance systems’
probable under-reporting should be taken into account. In 2007, a hepatitis A outbreak occurred in Greece with the majority of cases in the population of Roma. Hepatitis A is still a childhood disease among Roma, while in the general population it mainly occurs among susceptible adults. Hepatitis A continues to be a public health concern in Greece, especially in Roma population. This fact stresses the need for monitoring the vaccination coverage of the population and for implementing measures in order to improve it.

References


Table 1. Number of notified cases and annual notification rate of hepatitis A in Greece, Mandatory Notification System, 2004-2011.

<table>
<thead>
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<th>Year</th>
<th>Number of cases</th>
<th>Annual notification rate (per 100,000 population)</th>
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<td>2004</td>
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</tr>
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<td>0.51</td>
</tr>
<tr>
<td>2011</td>
<td>41</td>
<td>0.36</td>
</tr>
</tbody>
</table>

Graph 1. Time trend of hepatitis A notification rate (number of cases per 100,000 population), Mandatory Notification System, Greece, 2004-2011.
Graph 2. Mean annual notification rate (number of cases per 100,000 population) of hepatitis A by age group, Mandatory Notification System, Greece, 2004-2011.

Figure 1. Mean annual notification rate of hepatitis A by region (cases/100,000 population), Mandatory Notification System, Greece, 2004-2011.
Graph 3. Mean monthly notification rate (cases/100,000 population) of hepatitis A in Greece, Mandatory Notification System, 2004-2011.

Graph 4. Number of hepatitis A notified cases per age group among Greeks and Roma, Mandatory Notification System, Greece, 2004-2011.