Hepatitis A in men having sex with men (MSMs) in northern Italy

Infezione da HAV nella popolazione omosessuale maschile in Italia settentrionale

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Italy has long been considered an endemic country for hepatitis A virus (HAV) infection. However, age-specific HAV seroprevalence rates show a decreasing trend over the years, likely due to the progressive improvement in hygienic conditions in the last 50 years [1]. However, sporadic epidemics still occur following ingestion of contaminated food or otherwise risky behaviour [2]. Contrary to the past, Italian youngsters are thus largely not naturally immunized against hepatitis A infection. Further to this, even if the HAV vaccine has been available in Italy since 1995, it is essentially considered a travel-related vaccine and its use is not widespread even in this setting [3]. In Brescia, lasting recent years, acute HAV infection was mainly travel-related in childhood and young adulthood.

During the first nine months of 2009, hospital-based epidemiology of acute hepatitis A dramatically changed, suggesting that hepatitis A virus is circulating in the young male homosexual community. Our Department of Infectious Diseases is the only specialized unit in the Province of Brescia (1.1 million population) in northern Italy. It is part of the Brescia General Teaching Hospital, one of the largest hospitals in Italy (2250 beds). All cases of hepatitis A from other hospitals in the area are referred to our Department. We are thus confident that nearly all cases of symptomatic acute HAV infections occurring in the province of Brescia are observed by us. Medical files of all cases of acute hepatitis A hospitalized at the Department of Infectious Diseases of the University of Brescia - Spedali Civili General Hospital were reviewed and age, sex, risk factors (food, travel, sex) and presence of HIV co-infection were analyzed.

Table 1 - Acute HAV cases in Children, Adults (heterosexuals and MSMs).

<table>
<thead>
<tr>
<th></th>
<th>Tot. 2008</th>
<th>Tot. 2009 (Jun-Sept)</th>
<th>Tot. 2008-09</th>
</tr>
</thead>
<tbody>
<tr>
<td>Children &lt;18 years</td>
<td>10</td>
<td>5</td>
<td>15</td>
</tr>
<tr>
<td>Adults (heterosexual)</td>
<td>6</td>
<td>6</td>
<td>12</td>
</tr>
<tr>
<td>Adults (MSMs)</td>
<td>5 (1 HIV)</td>
<td>18 (6 HIV)</td>
<td>23 (7 HIV)</td>
</tr>
<tr>
<td></td>
<td>1 travel</td>
<td>2 travel</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1 food</td>
<td>8 food</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3 unknown</td>
<td>9 unknown</td>
<td></td>
</tr>
<tr>
<td>Adults (unknown)</td>
<td>0</td>
<td>4</td>
<td>4</td>
</tr>
</tbody>
</table>

In the period January 2008-September 2009, 54 cases of acute hepatitis A (15 children, 39 adults) were hospitalized at our Department, as reported in Table 1 by age and sexual orientation. In comparison to 2008, the number of cases recorded in children in 2009 decreased. In contrast, the number of cases in young, sexually active subjects increased significantly, mainly in men having sex with men (MSM), in the first nine months of 2009.

Of the 18 cases of acute HAV reported in 2009 in MSM, only in 9 cases was a possible classical exposure (2 travel abroad and 8 possibly risky food) identified, suggesting that the sexual route might be responsible for the infection. Of note, 1/5 and 6/18 MSM subjects with acute hepatitis A infection in 2008 and 2009 were also HIV-infected, respectively. None of the acute
hepatitis A cases reported HAV vaccination. Apart from the alimentary route, HAV infection may be transmitted via the sexual, particularly homosexual, route and also, much less commonly, via the parenteral route [4, 5]. Epidemics of HAV in MSM have been reported elsewhere (6). The decreasing circulation of hepatitis A virus via the classical alimentary route in Italy is the cause of the decreasing natural immunity to the disease in the young, sexually active, population. We observed a decreasing trend in acute HAV infection in children, even if most travel-related cases in children are expected to occur after summer during autumn and are related to travel to HAV-endemic areas. Besides the travel-associated risk, contact with infected children from endemic areas and contaminated food, sexual behaviour is also to be considered a possible route for transmission in Western countries, suggesting that Hepatitis A vaccination be considered in MSM [7].

According to our results, HAV is circulating among the MSM community in our area, reinforcing the need for MSM to be adequately advised and vaccinated against HAV, as recommended [8]. This is particularly the case when co-infection with HIV is present. We strongly recommend that physicians treating HIV infection in MSM or persons with otherwise risky sexual behaviour consider HAV vaccination as part of the routine preventive measure.

Key words: hepatitis A, homosexuality, sexual practices.

During 2009 there was an increased incidence of acute hepatitis A virus (HAV) infection among homosexual males which, in our institute, outnumbered the number of cases in travellers, thus becoming the prime HAV risk factor. Some of our HAV cases occurred in HIV-infected subjects. This observation underlines the action of HAV as a sexually transmitted infection and urges preventive measures, such as routine HAV vaccination in the HIV-infected population.

**REFERENCES**


