Viral Hepatitis Prevention Board Meeting

November 18-19, 2004, Veyrier du Lac

Hepatitis B and C registries
Definition

A population-based registry is a structure:

1. continuously recording all new cases of a disease in a well defined population,

2. organizing cooperative research studies based on this record.
Hepatitis B and C registries

- Calvados
  - 2004
- Meurthe & Moselle
  - 2000
- Cote d’Or + Doubs
  - 1994-1995

* 2 millions inhabitants
Biological and virological laboratories

HEPATITIS REGISTRY

Specialists in: gastroenterology, infectious diseases, internal medicine...

General practitioners
. Epidemiological studies
. Studies on patient management
. Cooperative studies

1 million inhabitants
83 biological laboratories
1500 GP’s
64 gastroenterologists
Incidence of diagnosed cases

Annual HBs ag detection rates / 100 000:
- males: 10.1 ± 0.7
- females: 8.2 ± 0.6

~ 6,000 new cases in France

Annual HCV ab detection rates / 100 000:
- males: 33.1 ± 0.9
- females: 22.6 ± 0.7

~ 18,000 new cases in France
HCV Ab detection rates*

* per 100,000 inhabitants per year

** p<0.001

- 8.0% per year**
HBs Ag detection rates

(year /100,000)

Males

Females

Time trends in detection rates (/year /100,000) according to risk factors

The decrease of HBs Ag detection rates was found in all risk factors but endemic area.
Incidence of acute hepatitis B
. Epidemiological studies
. Studies on patient management
. Cooperative studies

1 million inhabitants
83 biological laboratories
1500 GP’s
64 gastroenterologists
1508 HCV +*

257 EXCLUDED CASES

Age <15 ou >75
HIV+, HCC, quick death.

1251 studied cases

* diagnosed between 1994 and 2000
<table>
<thead>
<tr>
<th></th>
<th>Normal ALT</th>
<th>Drug addict.</th>
<th>Alcohol</th>
</tr>
</thead>
<tbody>
<tr>
<td>not followed</td>
<td>55%</td>
<td>58%</td>
<td>23%</td>
</tr>
<tr>
<td>followed</td>
<td>43%</td>
<td>46%</td>
<td>19%</td>
</tr>
<tr>
<td>$p$</td>
<td>&lt;0.02</td>
<td>=0.01</td>
<td>=0.8</td>
</tr>
</tbody>
</table>

No healthcare
202 cases (16 %)

1251 VHC+
1251 VHC+

Healthcare
1049 cas

Treatment*
262 (25 %)

* Median delay between diagnosis and treatment: 8.4 months
### Factors correlated with treatment in RNA positive patients

<table>
<thead>
<tr>
<th>Factor</th>
<th>OR</th>
<th>CI 95%</th>
<th>p</th>
</tr>
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<tbody>
<tr>
<td><strong>Females</strong></td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Males</strong></td>
<td>1.6</td>
<td>[1.1 - 2.0]</td>
<td>0.001</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15-34</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>35-64</td>
<td>1.2</td>
<td>[0.8 - 1.5]</td>
<td>0.008</td>
</tr>
<tr>
<td>65-74</td>
<td>0.4</td>
<td>[0.2 - 0.8]</td>
<td>0.008</td>
</tr>
<tr>
<td><strong>Alcohol</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>+</td>
<td>0.4</td>
<td>[0.3 - 0.6]</td>
<td>0.0002</td>
</tr>
<tr>
<td>unknown</td>
<td>0.4</td>
<td>[0.3 - 0.7]</td>
<td>0.0002</td>
</tr>
</tbody>
</table>
### Non treatment reasons in Metavir > A1F1* patients

<table>
<thead>
<tr>
<th>Reason</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normal ALAT</td>
<td>15.5%</td>
</tr>
<tr>
<td>Contraindication</td>
<td>32.4%</td>
</tr>
<tr>
<td>Alcoholism</td>
<td>11.3%</td>
</tr>
<tr>
<td>Lost to follow-up</td>
<td>16.9%</td>
</tr>
<tr>
<td>Patient refusal</td>
<td>8.5%</td>
</tr>
<tr>
<td>Too low histological score</td>
<td>7.5%</td>
</tr>
</tbody>
</table>

* 30 % non treated
- Epidemiological studies
- Studies on patient management
- Cooperative studies

1 million inhabitants
83 biological laboratories
1500 GP’s
64 gastroenterologists
Incidence of malignant non hodgkin lymphoma

Hepatitis registry*

797 HCV patients (1994-1999)

median follow-up
45.3±19.7 months

Blood malignancies registry*

Number of expected cases = 0.6

* Cote d’Or
Observed cases in HCV patients: 5

= SIR : 8.1 (2.6-18.9; p<0.001).

<table>
<thead>
<tr>
<th></th>
<th>&lt;F3</th>
<th>F3+F4</th>
</tr>
</thead>
<tbody>
<tr>
<td>MNHL</td>
<td>0</td>
<td>5 (100%)</td>
</tr>
</tbody>
</table>
| No MNHL     | 672 (85%) | 120 (15%) | p<0.01
CONCLUSION

Population-based registries are necessary in the fight against hepatitis B and C:

- to know the epidemiology of diagnosed cases and its time trends
- to evaluate the impact of screening campaigns and guidelines
- to evaluate the utility of health networks and the effectiveness of treatment in real life
- at longer term to know the natural history of these hepatitis in the general population.
Anne Minello, Valerie Jooste
Fatiha Radi, Cyril Hatem
Alice Gagnaire

With the backstage staff...

Elisabeth Monnet, Estelle Naudet,
Philippe Euvrard, Solange Bresson Hadni,
Jean Philippe Miguet