Identification and management of persons with chronic viral hepatitis in Europe

Country sessions

BELGIUM

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BASL

VHPB meeting "identification and management of chronic viral hepatitis in Europe" 18-19 march 2010, Budapest, Hungary.
Burden of disease: hepatitis B and C

- **In Belgium:**
  - Passive surveillance through mandatory notification of hep B (Royal Decree 1.3.1971) and C cases (as of 2009 no longer in all regions).
  - Few epidemiological data
1. Hepatitis C
Burden of disease: hepatitis C

• Cross sectional study in Belgium in 2003:
  - HCV Ab+: 0.12% (0.87% + in 1993 serum)
  - HBsAg+: 0.66% (0.70% + in 1993 serum)

• Saliva test send to n=6000 => 30,6% responded =>
  3/10 000 people in Flanders represented

• At risk population probably underrepresented


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Burden of disease: hepatitis C


• HOSPITALS: Cross sectional study in Belgium in 2003
  • Prospective observatory in Belgium in 2003-2004, new consecutive anti-HCV+ patients in 9 hospitals (2° and 3° health care centers)
  • N= 318 55% Men  median age 45y [11-87y]
  • Results:
    • 87% PCR HCV +
    • 66% abN transaminases
    • Identified Risk factors:
      – IDU: 27% (underrepresented)
      – Blood transfusion: 23%
      – Invasive medical procedures: 11%
      – Unknown: 23%
    • Stage: 43% F0F1; 35% F2; 22% F3F4
    • Genotypes: G1: 59%; G3: 19%; G4: 14%
    • QOL: 61 ± 31 (0-100)
Burden of disease: hepatitis C

- **HCV in IDU**
  - IDU recruited at tt centers all over B*: n = 147 antiHCV+
  - 70% of all IDU are antiHCV + => 67% is PCR +
  - G1: 38%; G2: 2%; **G3: 49%;** G4: 9%

- IDU recruited at 2 Flemish Centres (Antw/Limburg)° n = 155
  - G3a remains Steady state; G1a becomes predominant => harmful on long term

Burden of disease: hepatitis C

• HCV/HIV coinfection: Belgian study
  • 9 centres, open, non controlled, prospective trial between 9/2001-dec/2003
  • 10-15% of all HIV+ pts are antiHCV +
  • N = 37

56% have ≥ F3
65% receive HAART
SVR after 52w pegIFNa2b/Riba: G1/4: 13%  G2/3: 47%
30% stopped tt because of side effects

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Screening programme HCV

• Since 1990: screening of blood and blood products/tissues for HCV
• Universal precautions in healthcare setting
• Screening of pregnant women
• Opportunistic screening by GP and gastro-enterologists
• National screenings days HCV: 2001 and 2004, sponsored by medical company SP
Treatment strategies in B: HCV

• For G1, G4, G5 and G6:
  - Liver biopsy required
  - 48w peg IFN alfa 2a or 2b + ribavirin
  - At 12w: PCR should be ≥ 2log ↓
  - Price: 1000€x11+ 700€x11= ± 18 700€/48w
  - RIZIV/INAMI pays for it: 98%
  - The patient pays ± 35 euro/month = 385€/48w
  - FU: w2-4-6-8, then every 4-6w, EOT, SVR

    if F3-F4: US + αFP every 6months
Treatment strategies: HCV

• For G2, G3:
  - No liver biopsy required
  - 24w peg IFN alfa 2a or 2b + ribavirin
  - Price: 1000€x6 + 700€x6 = ± 10 200€/24w
  - RIZIV/INAMI pays for it: 98%
  - The patient pays ± 35 euro/month = 210€/24w
  - FU: w2-4-6-8, then every 4-6w, EOT, SVR
    if F3-F4: US + αFP every 6months
Treatment strategies: HCV/HIV coinfection

- **For all genotypes:**
  - Liver biopsy required
  - 48w peg IFN alfa 2a or 2b + ribavirin
  - Price: 1000€x11+ 700€x11= ± 18 700€/48w
  - RIZIV/INAMI pays for it: 98%
  - The patient pays ± 35 euro/month = 385€/48w
  - FU: w2-4-6-8, then every 4-6w, EOT, SVR
    - if F3-F4: US + αFP every 6months
Treatment strategies:
Health economic model HCV in Belgium

- 29% of all liver transplants due to HCV in B
- Immediate treatment of HCV with mild HCV F1
  => more expensive
  => less complications
  => higher % cured

For G1, 4, 5, 6: 23,000 €/QALY
For G2, 3: 4,600 €/QALY

=> cost/effective if < 50 000€ /QALY

2. Hepatitis B
Burden of disease: hepatitis B

- **BASL registry 12m 3/2008-2/2009**: report all HBsAg+ pts at consultation
- **N = 1421 pts** 26 centres 71% prevalent
- **Mean age: 42y** 67% male
- **52% Caucasian** 25% black Africans
- **Risk factors**: 14% transfusion; 9% IDU; 6% surgery; 38% sexual behavior; 33% familial transmission
- **92/1421 = 12% coinfectected** (HDV 26; HCV 28; HIV 32)
- **Liver biopsy** in 641 pts: F0F1:40%; F2: 24%; F3: 19%; F4: 17%
- **Phase**: Immune tolerant: 0.7%; HBeAg+: 17%; HBeAg-: 29%; inactive carrier: 44%; 9% not classified

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P. Deltenre. Acta GE Belgica 2010, oral presentation at Belgian Week of GE
Burden of disease: hepatitis B

- **KCE registry 6m 1/2009-6/2009**: report all HBsAg+ pts at consultation + data of 2006 if available
- **Objectives:**
  - To estimate number of pts visiting a specialist for HBV
  - To document the distribution of different HBV stages
  - To document QOL per disease stage (EQ-5D CRF)
  - To document the expenses for health insurance per disease stage

- **18 centres**  n= 544 pts  mean age: 46y  47% men
- 51% European  9% Turkey  22% Africa  18% Asia
- 2% had HCC  11% were transplanted  14% had cirrhosis
- **Immune tolerants:** 4%  34% inactive carriers  20% HBeAg+
  40% HBeAg-  2% HBsAg-

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Burden of disease: hepatitis B

- KCE registry 6m 1/2009-6/2009: report all HBsAg+ pts at consultation + data of 2006 if available
- QOL
  - HCC and decompensated cirrhosis: 0.67 and 0.7
  - LTx: 0.82
  - Rest: 0.8

Cost effectiveness model: has still to be done
Screening programme HBV

- Since 1972: screening of blood and blood products/tissues for HBV
- Universal precautions in healthcare setting
- Screening of pregnant women
- Opportunistic screening by GP and gastro-enterologists
Screening/prevention programme HBV

Results

• **Pregnant women**: if HBsAg+ => newborn should receive vaccination AND immunoglobulins within 24h

• **Systematic vaccination for infants**: since 1999

• **Systematic vaccination for adolescents**: since 1999

• **Reimbursement for HBV vaccine** since 1980ies for at risk population (hemophiliac, HD, family, pre-and post Tx, handicapped, ...)

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Since jan 2010: finally good reimbursement criteria

- **Liver biopsy** required: inflammation and/or fibrosis; **ALT** at 2 time points elevated
- **Viral load HBV DNA**: $> 2000$ IU/ml
- **Which products**:
  - Lamivudine in 1st line
  - Adefovir in 2nd line
  - Entecavir in 1st and 2nd line
  - Tenofovir in 1st and 2nd line
- **FU**: every 3 to 6m under therapy; if F3-F4: US every 6months
## Drugs available in Belgium

<table>
<thead>
<tr>
<th>Drug</th>
<th>Cost per year</th>
<th>in B</th>
<th>TT duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peg-interferon α2a</td>
<td>11.468 €</td>
<td>1° line</td>
<td>48w</td>
</tr>
<tr>
<td>Lamivudine</td>
<td>749 €</td>
<td>1° line</td>
<td>?</td>
</tr>
<tr>
<td>Adefovir</td>
<td>6.159 €</td>
<td>2° line</td>
<td>?</td>
</tr>
<tr>
<td>Tenofovir</td>
<td>4.992 €</td>
<td>1° + 2° line</td>
<td>?</td>
</tr>
<tr>
<td>Entecavir</td>
<td>5.244 €</td>
<td>1° + 2° line</td>
<td>?</td>
</tr>
</tbody>
</table>
Conclusions:
Screening for HCV and HBV in Belgium

• No coordinated screening at federal/regional level
• As specialist => try to stimulate/alert general practitioners to screen the at risk population
• Centres for IDU, STI clinics, ... => screen for HIV, HBV and HCV
Conclusions:

Prevention for HCV and HBV in Belgium

- No coordinated prevention at federal/regional level
- Centres for IDU => vaccinate sometimes for HAV/HBV
- Systematic HBV vaccination: advised for all babies and children (11-12y) since 1999
- Reimbursement of HBV vaccine in some risk groups since 1980ies
The end!