Identification and management of persons with chronic viral hepatitis in Europe

Country sessions

BELGIUM

Isabelle Colle MD PhD (Ghent University Hospital)
Greet Hendrickx
Pierre Van Damme MD PhD
For the Belgian Association for the Study of the Liver
BASL

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

S. Quolin. Eur J Epidemiol 2007; 22:195 - 202

Burden of disease: hepatitis C

S. Demaeght. Acta Gastroenterologica Belgica 2008;71: 19-23

- **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]
- <u>Results:</u>
  - 87% PCR HCV +
  - 66% abN transaminases
  - Identified Risk factors:
    - IDU: 27% (underrepresented)
    - Blood transfusion: 23%
    - Invasive medical procedures: 11%
    - Unkown: 23%
  - Stage: 43% F0F1; 35% F2; 22% F3F4
  - Genotypes: G1: 59%; G3: 19%; G4: 14%
  - QOL: 61 ± 31 (0-100)

- 85% Caucasian
- 9% African

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

G. Robaeys. Acta Gastroenterologica Belgica 2002; 65:99-100
Micalessi* J Med Virol 2008; 80: 640-645 . C. Matei °J Viral Hepat 2008; 15:399-408.

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

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

P. Michielsen. Acta gastroenterologica Belgica 2009; 72:389-393

Screening programme HCV

Implementation

- 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

S. Gerkens et al. J Viral hepatitis 2007; 14: 523-536

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% **coinfected** (HDV 26; HCV 28; HIV 32)
- **Liver biopsy** in 641pts: F0F1:40%; F2: 24%; F3: 19%; F4: 17%
- **Phase:** Immune tolerant: 0.7%; HBeAg+: 17%; HBeAg-: 29%; inactive carrier: 44%; 9% not classified

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

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-

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

Implementation

- 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, …)

Treatment strategies: HBV

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

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

Drugs available in Belgium

Drug	Cost per year	in B	TT duration
Peg-interferon α2a	11.468 €	1°line	48w
Lamivudine	749 €	1° line	?
Adefovir	6.159 €	2° line	?
Tenofovir	4.992 €	1° +2° line	?
Entecavir	5.244 €	1° + 2°line	?

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!