Identification and management of persons with chronic viral hepatitis in Europe

Country sessions

The Netherlands

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Burden of disease

- HBV and HCV notifiable in Public Health Law
  - HBV: acute and chronic (since 1976)
    - ≈250 acute and ≈1500 chronic cases per year
  - HCV: since 1999 acute+chronic, since 2003 acute only
    - acute cases per year 34 in 2004 to 52 in 2009
- Prevalence data
  - HBV: 0.2% (Nationwide seroprevalence study 1995)
  - HBV: 0.3-0.4% (Pregnancy screening)
  - HBV: 0.4% (Amsterdam N=1300)
  - HCV: 0.01% (Nationwide seroprevalence study 1995)
  - HCV: 0.2% (Regional study N=2200)

Screening strategy

GOALS

Hepatitis B

- Pregnancy screening (since 1989)
  - Primary prevention to newborns
- Risk groups: drug users, MSM, sex workers, heterosexuals with multiple contacts (up to 2007)
  - Screening prior to vaccination, identify susceptibles
- Contact screening
  - Vaccination of susceptible contacts
  - Identification of new HBsAg infections
- Screening of migrants (Chinese and Turks, 3 cities)
  - Indentify and treat eligible patients (secondary prevention)

Screening strategy

GOALS

Hepatitis C

- Risk groups: drug users (≈since 2004)
- General public: pilot projects 2007/2008
- National Hepatitis C Campaign (Sept 2009-Feb 2010)
  - General public:
    - Blood transfusion before 1992
    - Use of ever used hard drugs
    - Born in endemic country

→ Goal: Secondary prevention

Screening programme

Target population	Identification proces
Pregnant women	Antenatal care
MSM / sex workers	Outreach / STI clinic
Drug users	Drug users services
Heterosexuals >partners	STI clinic
Contacts of cases	Public Health Service
General public	Information campaign
Chinese	Campaign
Turks	Campaign

Screening programme

Implementation

- Nationwide
  - Pregnancy screening (HBV)
  - Contact screening (HBV)
  - Risk groups as part of vaccination campaign (HBV)
  - HCV Campaign
- Regional pilots
  - Chinese (Rotterdam 2009, The Hague 2010)
  - Turks (Arnhem 2009, Rotterdam 2010)

Screening programme

Results

- Pregnancy screening

  ≈950 HBsAg positive women per year

- Risk groups; 5 year period (2002-2007)

	1st vac	**HBsAg+ (%)**
MSM	18,510	≈148 (0.8)
DU	13,482	≈94 (0.7)
CSW	9,391	≈94 (1.0)
Heterosex	39,297	≈236 (0.6)
Total	**80,680**	**≈565 (0.7)**

Screening programme

Results

- Follow up of identified HBsAg positives in pregnancy screening and risk group campaign unknown
- Contact tracing HBV: results not reported and follow up unknown
- National HCV Campaign: no results yet
- HCV drug users, results project Rotterdam:
  - 293 screened in 2 years
  - 81 HCV RNA+
  - 64 referred for treatment, 35 started treatment

Screening programme

Results

- Pilot Chinese population in Rotterdam
  - 1,100 tested
  - 94 HBsAg+ (8.5%)
  - 32 HBeAg+ or elevated ALT (34% of HBsAg+)
  - 18 eligible for antiviral treatment (19% of HBsAg+)
- Pilot Turkish population in Arnhem
  - 709 tested
  - 18 HBsAg+ (2.8%), 2 HCV 0.3%
  - Clinical follow up ongoing

Costs of screening programme and the follow up

Payment of the screening programme	Payment of follow-up

National programmes:

Government

Pilots:

Different sources

(pharmaceutical companies, own contribution PHS and hospital, health insurance)

Patient invited for intake at Public Health Service

Government

Further health care

Medical insurance

Treatment strategies

Hepatitis B

- Guideline for referral from primary to secondary care
  - HBeAg+ and/or elevated ALT → to specialist
  - Follow up by GP when HBeAg- and normal ALT
- Treatment according to clinical guidelines (2008)
  - Initial evaluation: viral load, biochemistry, imaging
  - Consider PEG-INF
  - Low resistance nucleos(t)ide analoge
- Treatment covered by health insurance

Treatment strategies

Hepatitis C

- Guideline for referral from primary to secondary care
  - All patients to specialist
- Treatment according to clinical guidelines (2008)
  - Consider treatment for all patients
  - Take genotype into account
  - PEG-INF and ribavirine
- Treatment covered by health insurance

Impact of the screening strategy on the health care system

Limited impact on health system as number of patients detected is low

Impact on health difficult to assess due to limited follow up

Evaluation of screening, follow-up and treatment strategy

Strengths	Challenges
Pregnancy screening → good coverage	Pregnancy screening → follow up not good
Risk groups → high prevalence	Risk groups → low coverage
Migrants → high prevalence	Migrants → only local initiatives

Evaluation of screening, follow-up and treatment strategy

Lesson learnt/ opportunities

- Improve referral from primary to secondary care
- Pregnant women
  - Refer to specialist before third trimester
- Migrants can be reached through outreach campaign

  → study systematic approach

Evaluation of screening, follow-up and treatment strategy

Future plans

- Combine hepatitis B and C screening
- Target migrants!
- Implement nationwide screening targeted at migrants