HIV AND HEPATITIS COINFECTION IN GREECE

IOANNIS G. BARABOUTIS, M.D.
INFECTIOUS DISEASES & HIV CONSULTANT

5TH DEPARTMENT OF INTERNAL MEDICINE
INFECTIOUS DISEASES & HIV DIVISION
DIRECTOR: PROFESSOR A. SKOUTELIS

EVAGGELISMOS GENERAL HOSPITAL

VIRAL HEPATITIS PREVENTION BOARD MEETING
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Hepatitis C: A Global Health Problem

170-200 million carriers worldwide
10 million HIV coinfection*

*HCV/HIV coinfection linked to IDU

WHO. 1999.
Prevalence of Chronic HBV Carriers

350 million HBV carriers worldwide
3-5 million HIV coinfected*

Chronic HBsAg carriers:
- < 2% – Low
- 2–7% – Intermediate
- > 8% – High

* HBV/HIV coinfection linked to IDU and sexual transmission

ISSUES IN HIV/HEPATITIS COINFECTION

- Diagnosis of Chronic Hepatitis in HIV
- Influence of Hepatitis (B, C, G) on HIV Progression and Vice Versa
- Low Rates of Therapy and Therapy Completion for Hepatitis C in HIV
- Therapeutic Plan—Drug Management
- Efficacy of Therapy for Hepatitis
- Hepatitis Flares During or After Stopping ART
- HIV Resistance/Hepatitis Virus Resistance
- Drug-Drug Interactions
- Hepatotoxicity of ART

- Efficacy of Vaccination for B in HIV
- Role of Hepatic Steatosis in HIV/Hepatitis Coinfection
- Non-Invasive Alternatives to Liver Biopsy
- HCC in Coinfection
- Acute Hepatitis Infection in HIV
- Liver Transplantation in Coinfection
MINISTRY OF HEALTH & SOCIAL SOLIDARITY

HELLEINIC CENTER FOR DISEASE CONTROL & PREVENTION (HCDCP)
Σχετικά με τα δεδομένα:

**Πίνακας:**
- Ομο/αμφί - MSM
- Χ.Ε.Ναρκ. - LD. Users
- Πολυμετ. - Haemoph.
- Μεταγγ. - Transfus. Rec
- Ετεροφυλ. - Heterosexual
- Κάθετη μετάδοση - Mother-to-child

**Γράφημα:**
- Σεξουαλική επαφή μεταξύ ανδρών - Men who have sex with men
- Χρήστες ενδοβλέπων ναρκωτικών υλικών - Injecting drug users
- Ετεροφυλοφιλική σεξουαλική επαφή - Heterosexual contact

**Χάρτης:**
- Βάρος % HIV+ κατά το έτος δήλωσης

288 imprisoned IVDAs

- Prevalence of HBV serologic markers: 77%
- HbsAg carriers: 6.9%, of those 25% HbeAg(+) and (+) D serology in 35%
- HIV(+) : 2.1%

181 HIV(+) patients, M: 159, F: 22

- Prevalence of HBV markers 67.4%
  - 71.8% MSM/BS
  - 35.3% HS
  - 91.7% IVDA
  - 90.9% blood transf recip

- Prevalence of HCV antibodies 13.8%
  - 8.1% MSM/BS
  - 8.8% HS
  - 58.3% IVDA
  - 45.5% blood transf recip
EPIDEMIOLOGY OF HIV & HEPATITIS COINFECTION IN GREECE


194 male prisoners

- HBsAg (+): 13%  anti-HBc: 49%  anti-HBs: 21%
- anti-HCV (+): 6.5%
- None with HIV

- 6696 donors
- anti-HCV (+) : 0.61%
- None with HIV
EPIDEMIOLOGY OF HIV & HEPATITIS COINFECTION IN GREECE


737 HIV(+) patients

HbsAg (+) : 12%, of those 61% HbeAg (+)
anti-Hbc (+): 48%
HBV DNA 5.75 +/- 1.66 (log 10 copies/ml)
[HbeAg (+)7.40 +/- 0.64 vs HbeAg(-) 4.59 +/- 1.01]

anti-HCV (+) : 8.2%
85% with >700,000 IU/ml
43% Genotype 1
LONG-TERM FOLLOW UP OF COINFECTED PATIENTS IN GREECE


- HBeAg(+) chronic hepatitis B very common in HIV/HBV coinfected patients in contrast to the general Greek population.

- LAM beneficial, especially in HBeAg(+) but high rates of LAM-resistant HBV mutants with long-term treatment.

- Pegylated-interferons may benefit a selected group of coinfected patients with LAM-resistant HBV

- Long-term control of HIV disease, even without LAM, beneficial in HbeAb(+) coinfected patients
LONG-TERM FOLLOW UP OF COINFECTED PATIENTS IN GREECE


- Long-term LAM treatment beneficial for vast majority of chronic HBV infected and HIV/HBV coinfected patients, especially HBeAg(+) coinfected with extremely high HBV viral loads.

- Histological benefit observed even in long-term virological breakthroughers CHB patients who exhibited long-term biochemical response under LAM monotherapy.

- LAM discontinuation resulted in high relapse rates and severe complications even in patients who were long-term complete responders.
LONG-TERM FOLLOW UP OF COINFECTED PATIENTS IN GREECE


158 haemophilic men with known seroconversion dates followed up prospectively for a median time of 12 and 5.7 years in the pre- (1980-96) and post-HAART period (1997-2003)

Risk of AIDS was lowered by 56% in the post- as compared to the pre-HAART period
Risk for non-AIDS deaths was fourfold increased post-HAART.
End-stage liver disease: predominant cause of non-AIDS mortality in both periods
RATES OF COINFECTION IN A HIV COHORT OF A TERTIARY CARE HOSPITAL

RATES OF HIV/HEPATITIS COINFECTION AMONG A COHORT OF HIV-INFECTED PATIENTS ATTENDING THE HIV UNIT OF EVAGGELISMOS GENERAL HOSPITAL

- B
- C
- NO HEP
HIV/HCV COINFECTION
HIV UNIT
EVAGGELISMOS GENERAL HOSPITAL
PERIOD 2006-7

- 20/495 HIV(+) patients: 4%
  - 17M, 3F

- Mean age: 44.5 y (min 32, max 80)

- Mean BL CD4 325
- Mean CD4 At Hep Dx 375
- Mean BL HIV VL 47000

- ART: 18/20 (1STI)
  - Mean Hep C VL: 850.000 IU/ml
  - HEP C VL: Never detectable in 6/20

- Mean HIV duration: 8 y
- Mean Hep C duration: 5 y

- Subtypes: 6/20 known
  - 3: 4/20
  - 1a: 1/20
  - 1b: 1/20

- Biopsy: 2/20

- Rx: 4/20
  - IFN+RBC: 3/20
  - PEG-IFN+RBV: 1/20

- Outcome:
  - SVR: 2/20
  - Recurrence: 2/20
  - Cirrhosis: 2/20 (known)
  - 4 deaths: 2 due to cirrhosis
  - No HCC
HIV/HBV COINFECTION
HIV UNIT
EVAGGELISMOS GENERAL HOSPITAL
PERIOD 2006-7

- 10/495 HIV(+) patients: 2%
  - 9M, 1F
- Mean age: 44 y (min 31, max 57)
- RF: MSM 8/10, HS: 2/10
- Mean BL CD4 343
- Mean CD4 At Hep Dx 397
- Mean BL HIV VL ~50000
- Mean HIV duration: 7y
- Mean Hep B duration: 5y
- eAg(+): 4/10
- Seroconversion: 3/10
- Anti-D(+): 1/6
- Biopsy: 0/10
- ART: 8/10
- Rx for Hep: 3TC: 4/10
  - TDF+FTC: 2/10
  - TDF+3TC: 2/10
- Outcome:
  - SVR: 6/10
  - Recurrence: 1/10
  - Cirrhosis: 0/10
  - 1 death from HCC (w/o cirrhosis)
HIV/HEPATITIS COINFECTION
HIV UNIT
AHEPA GENERAL HOSPITAL
HIV cohort: 551 patients

- HCV coinf: 42 (7,6%)
  - RF: MSM 27, IVDA: 2, HS: 15
  - Biopsy: 23/42
  - Hep C Rx (IFN+RBV): 32/42
  - SVR 20
  - Recurrence 7
  - Non-resp 5
  - NO HCC

- HBV coinf: 24 (4,4%)
  - RF: MSM 17, IVDA 2, HS 10
  - Biopsy: 8/24
  - Hep B Rx:
    - Majority 3TC
    - TDF: 3
    - TDF+3TC: 7
    - TDF+FTC: 15
  - NO HCC

Courtesy of Dr. P. Collaras and Prof. P. Nicolaides, University of Thessaloniki)
HIV and Hepatitis B
HIV Unit
University of Patras Hospital, 2007

33% of HIV(+) patients with exposure to Hep B

Chronic Hep B in 6/92 HIV(+) patients: 6,95%

Rate of Hep B vaccination: 41% (M: 81%, F: 19%)

Successful immunization: 64%

Upcoming abstract at the Hellenic AIDS Conference

Courtesy of Prof. M. Marangos, University of Patras Hospital