

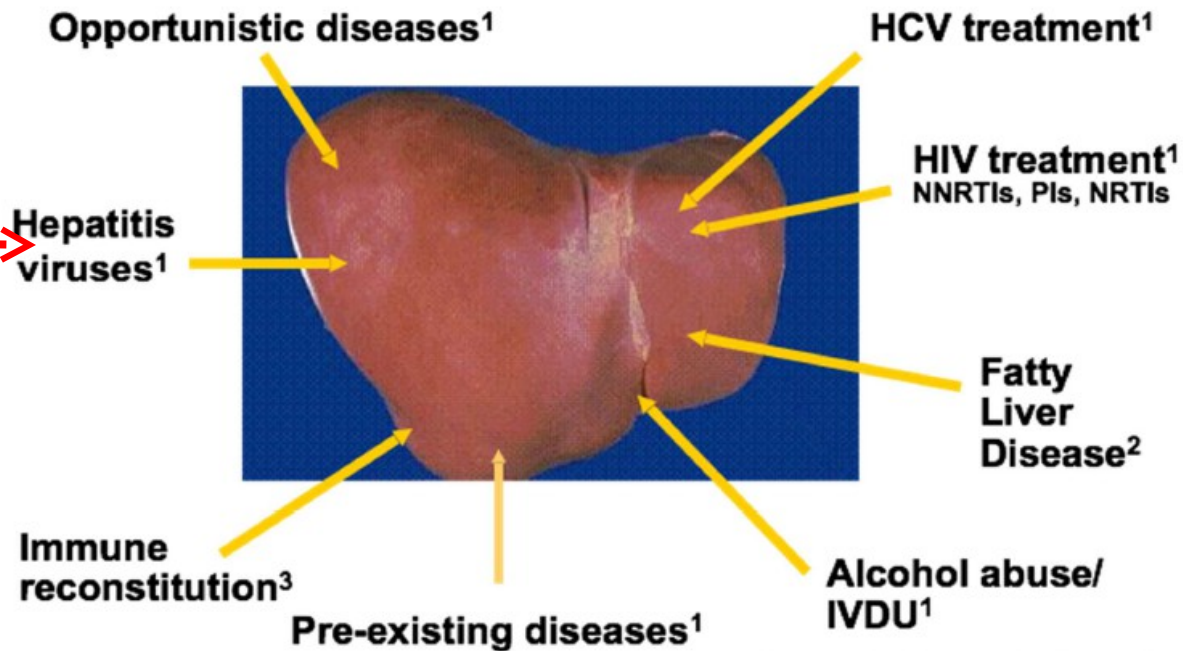
Severe liver disease in HIV patients

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Liver disease in HIV patients

Liver Disease in HIV-infected Patients

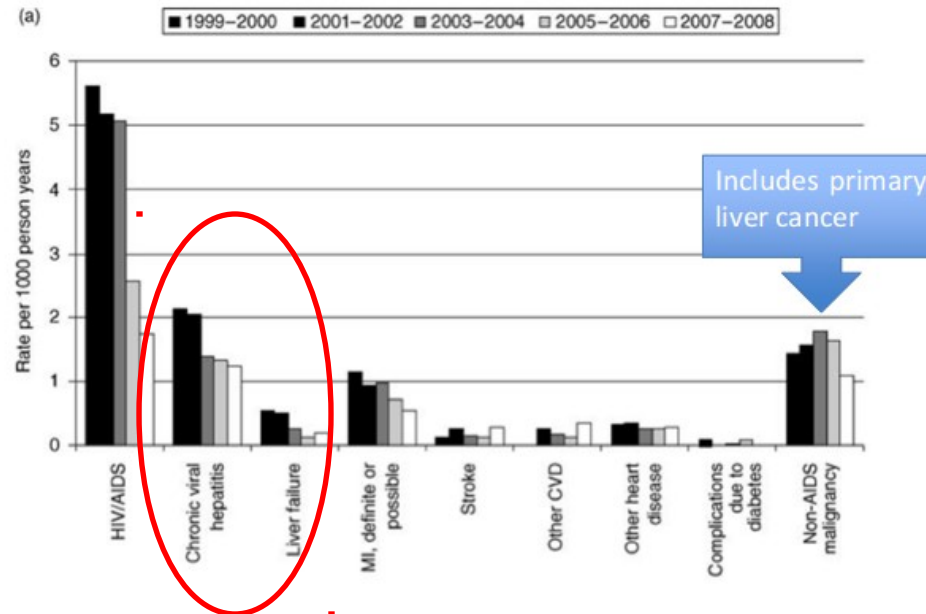
HBV
HDV
HCV
HEV



1. Sulkowski M. *et al.* Ann Intern Med. 2003;138:197-207
2. Guaraldi G *et al* Clin Infect Dis 2008 47(2): 250-257
3. Greub G *et al.* Lancet 2000;356:1800-1805

Liver disease in HIV patients

Causes of death in HIV



1. Weber R, Sabin CA, Friis-Møller N, Reiss P, El-Sadr WM, Kirk O, et al. Liver-related deaths in persons infected with the human immunodeficiency virus: the D:A:D study. Arch. Intern. Med. 2006;166:1632-1641.

Liver disease in HIV/HCV patients

- ***Hemophiliac male***
 - ***HCV/HIV co-infection***
 - ***how to monitor - noninvasive vs. liver biopsy***
 - ***past therapies – PEG-IFN and RIBA***
 - ***new therapies – DAA with highlight on drug to drug interaction***
 - ***availability and costs!***

Liver disease in HIV/HCV patients

New anti HCV agents in coinfecting patients

- ***With PEG/IFN***
 - ***Simeprevir+PEG/IFN+/-RBV***
 - ***Sofosbuvir+PEG/IFN+/-RBV***
- ***Without PEG/IFN***
 - ***SOF+SMP±RBV (12 or 24 weeks)***
 - ***SOF+DCV (12 or 24 weeks)***

ATTENTION TO DRUG TO DRUG INTERACTION!

Liver disease in HIV/HBV patients

- Markers of HBV exposure are present in the majority of HIV infected individuals and 10-15% have chronic HBV***
- the annual risk of developing cirrhosis in HBV appears to be much higher in those coinfecting with HIV. This may especially true in those with low CD4 counts***
- coinfection with HBV has been associated with increased hepatotoxicity to highly active antiretroviral therapy (HAART)***
- stopping the antiHBV therapy could induce severe flares with bad outcome***
- HCC is more frequent in HIV/HBV coinfecting patients***
- Liver transplant is effective in selected patient with HCC and HIV/HBV coinfection***

Liver transplantation and HIV-Infection

- ***In the pre-HAART era¹:***
 - No difference in immediate postoperative survival between HIV+ and HIV- patients***
 - Long-term high mortality rate due to infections and AIDS-related complications***
 - Rapid progression of HIV to AIDS***
- ***In the HAART era²:***
 - No difference in postoperative survival between HIV+ and HIV- patients***
 - Survival worse for low CD4-counts (<100/ μ l), post OLTX antiretroviral intolerance, VL > 400 copies/ml and HCV infection***

1) Tzakis AG et al., *Transplantation* 1990;49:354-358

2) Ragni MV et al, *J Infect Dis* 2003;188:1412-1420

Liver transplantation and HIV-Infection

Current practice is targeting liver transplantation at patients with:

- ***CD4 counts >200 cells/ul or >100 cells/ul in the presence of portal hypertension***
- ***Undetectable HIV RNA***
- ***Absence of AIDS defining illness after immune reconstitution,***
- ***Therapeutic options available if HIV disease reactivates.***

1) Tzakis AG et al., *Transplantation* 1990;49:354-358

2) Ragni MV et al, *J Infect Dis* 2003;188:1412-1420

Severe liver disease in HIV patients

HCV and HBV viruses represent the most significant causes of liver disease in HIV – infected persons

Active monitoring is mandatory, including liver biopsy in some cases.

Liver disease progression is faster in coinfecting patients so the monitoring visits have to be scheduled more often

Severe liver disease in HIV patients

For HCV/HIV coinfecting patient new therapies are promising – pay attention to drug to drug interaction

The availability of drugs and national and local regulation could impact the choice

Liver transplant is a good option for advanced liver disease with excellent outcome in HBV/HCV coinfecting patients and hopefully almost the same good results in HCV/HIV infection