

Primary and secondary prevention of HBV  
and HCV infections in health-care workers  
Should patients be tested before  
undergoing invasive procedures?

Virus Hepatitis Prevention Board  
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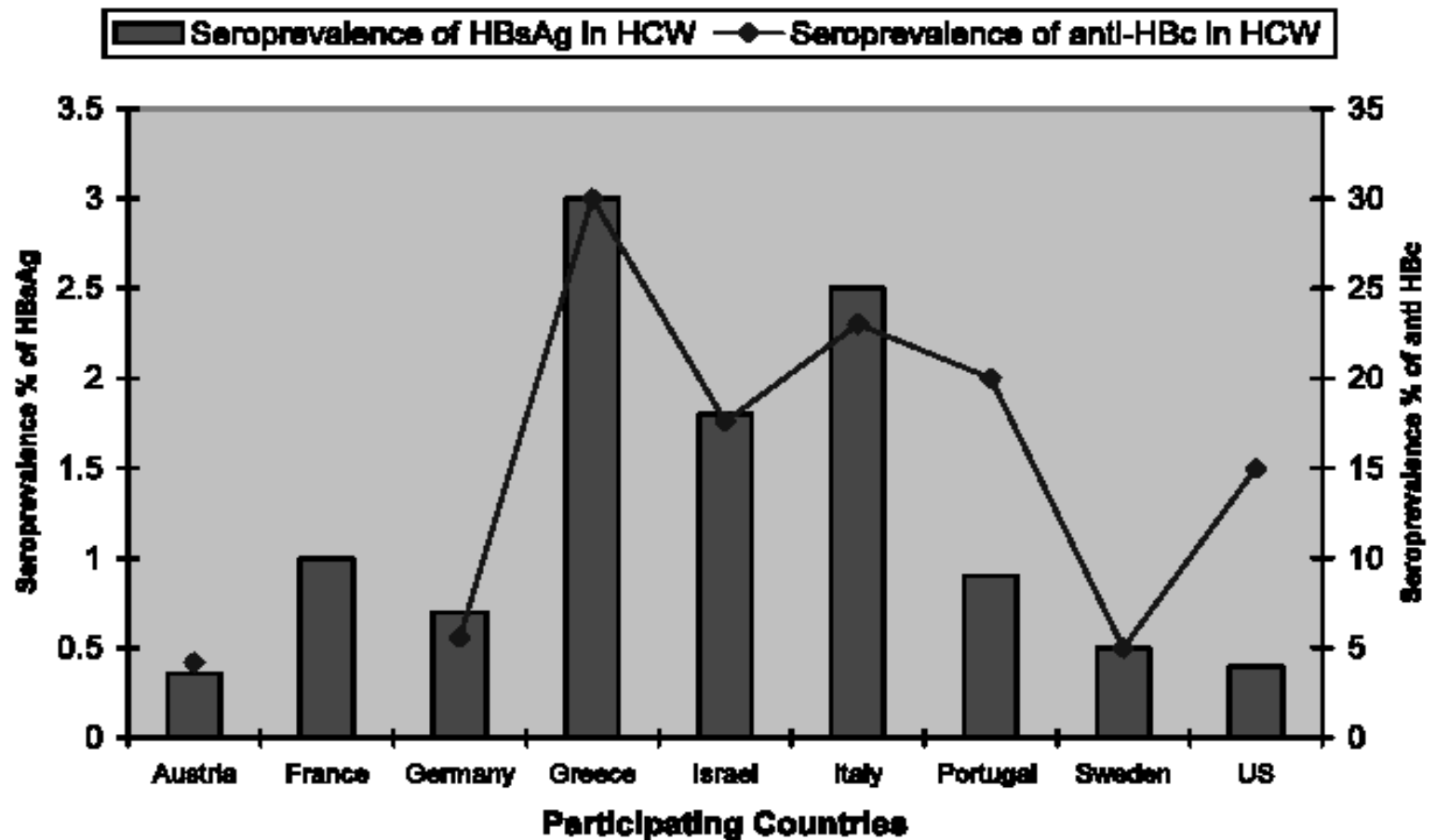
The logo for Charité - Universitätsmedizin Berlin, featuring the word "Charité" in a stylized, cursive script.

# Should patients be tested before undergoing invasive procedures?

- ▶ Is the answer NO ?
- ▶ No recommendations requesting that
- ▶ No public health rationale established
  
- ▶ Is the answer YES?
- ▶ Who has an interest/benefit in testing?

# Potential of HCW to transmit HBV

*R.N. Gunson et al. / Journal of Clinical Virology 27 (2003) 213–230*



# Evidence for transmission of HBV to Patients by HCW:

- ▶ Review by Gunson, Shouval, Roggendorf et al. (2003):  
45 published reports with more than 400 infected patients
- ▶ Review by Gerlich et al. (2004):  
HCW with pos HBeAg transmit to 4 % of patients, when performing procedures with high risks of injuries

# Patients tested for HBV:

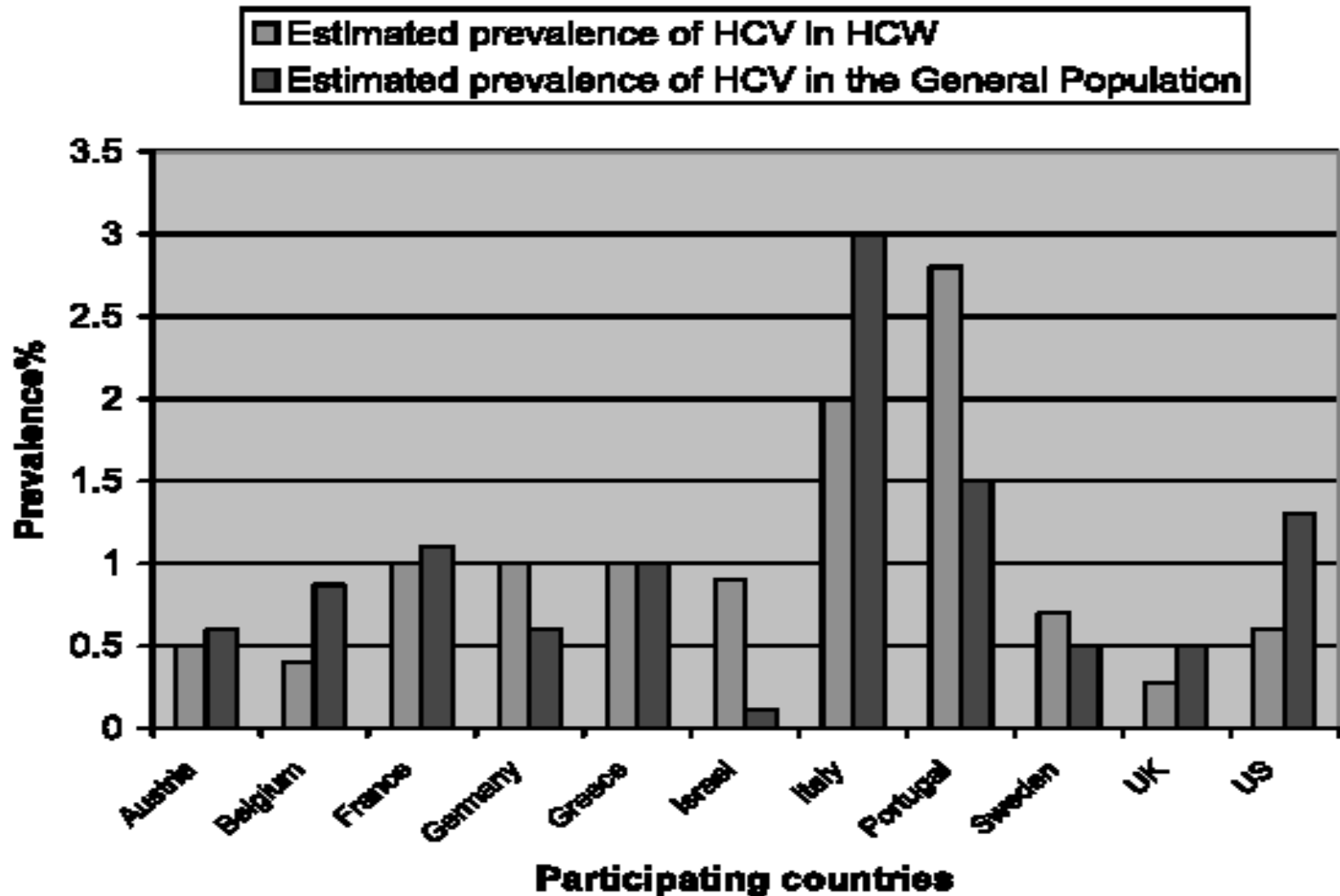
Baldo et al. (2002, Italy):

Postexposure HCW: source 245 patients:  
11.4 % HBV pos.; 5 year follow up: no  
transmission observed

# Patients tested for HBV:

- ▶ Beltrami et al. (2000, USA):  
Risk for HCW after percutaneous exposure is 6 - 30% for HBV
- ▶ Dresing et al. (2003, Germany):  
Emergency room patients: 0.84% of patients HBV pos. ( n = 1.074)

# Potential of HCW to transmit HCV



# Evidence for transmission of HCV to Patients by HCW:

- ▶ Review by Gunson, Shouval, Roggendorf et al. (2003):  
6 published reports with a total of 14 indefected patients
- ▶ Review by Puro, Scognamiglio, Ippolito (2003):  
8 cases with a total of 18 infected patients



# Patients tested for HCV:

- ▶ Baffoy-Fayard et al. (2003; France):  
Interventionel radiology: 9.7 % of patients  
HCV pos. ( n= 944)
- ▶ Baldo et al. (2002, Italy):  
Postexposure HCW: source 245 patients:  
27.8 % HCV pos.; 5 year follow up: no  
transmission observed

# Patients tested for HCV:

- ▶ Beltrami et al. (2000, USA):  
Risk for HCW after percutaneous exposure is 1.8% for HCV
- ▶ Dresing et al. (2003, Germany):  
Emergency room patients: 2.9 % of patients HCV pos. ( n = 1.074)

# Should patients be tested before undergoing invasive procedures?

- ▶ Patient with pos. Test results can be referred to proper treatment
- ▶ Patient with neg. test result can proof a nosocomial transmission in case this occurs
- ▶ Hospital obtains data for medico legal reasons to proof the non-transmission by its services
- ▶ HCW like to know to adapt their behaviour