

MANEJO DA EXPOSIÇÃO

OCUPACIONAL A

HBV

E

HCV

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RISCO

- Tipo de exposição – percutânea (agulha), mucosa
- Tipo de fluido – sangue, outros
- Características da infecção do paciente fonte - CV
- Susceptibilidade do profissional exposto

RISCO de aquisição percutânea

Hepatite B

- Risco ausente para profissionais vacinados com anti hbs+
- Risco de 6-30% para não vacinados em contato com pacientes com HbsAg +, sendo maior naqueles com HbsAg + e Hbe Ag+
 - viável no ambiente por 7 dias, mesmo sem sangue visível

Mast EE, Alter MJ. Prevention of hepatitis B virus infection among health-care workers. In: Ellis RW, ed. Hepatitis B vaccines in clinical practice. New York, NY: Marcel Dekker, 1993:295–307.

Werner BG, Grady GF. Accidental hepatitis-B-surface-antigen-positive inoculations: use of e antigen to estimate infectivity. Ann Intern Med 1982;97:367–9.

Hepatite C

- Estimativa de risco - 1.8%-3%
- 2 a 5 profissionais /ano podem adquirir HCV

Alter MJ. The epidemiology of acute and chronic hepatitis C. Clin Liver Dis 1997;1:559–68.

Lanphear BP, Linnemann CC Jr., Cannon CG, DeRonde MM, Pendy L, Kerley LM. Hepatitis C virus infection in healthcare workers: risk of exposure and infection. Infect Control Hosp Epidemiol 1994;15:745–50.

Puro V, Petrosillo N, Ippolito G, Italian Study Group on Occupational Risk of HIV and Other Bloodborne Infections. Risk of hepatitis C seroconversion after occupational exposure in health care workers. Am J Infect Control 1995;23:273–7.

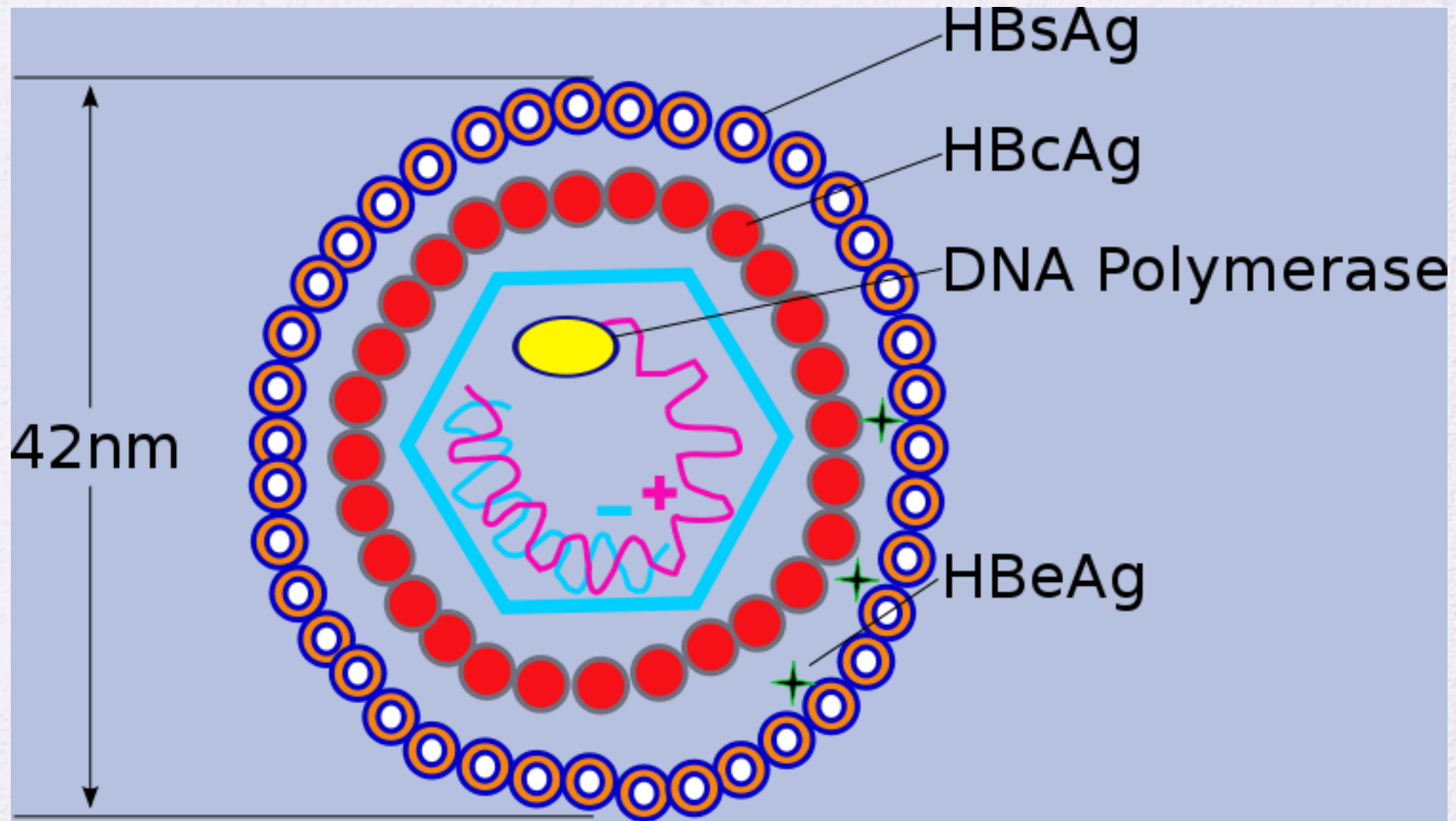
Mitsui T, Iwano K, Masuko K, et al. Hepatitis C virus infection in medical personnel after needlestick accident. Hepatology 1992;16:1109–14.

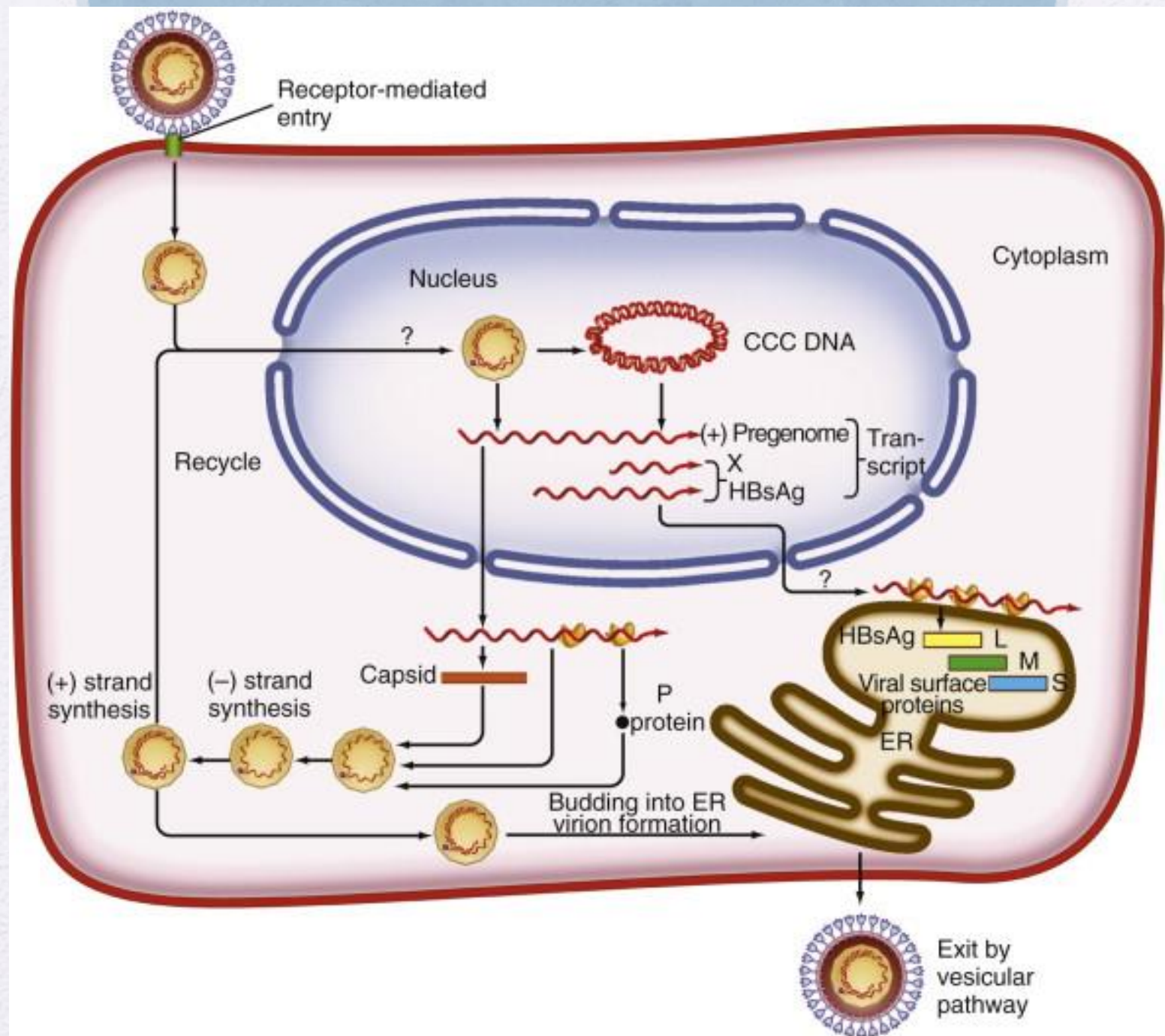
HEPATITE B

Vacina recombinante

- 3 doses (1 ml IM-deltóide)
- D0, 1 mês e 6 meses
- Comprovação de “viragem” sorológica após 2 meses da 3ª dose – DOSAR **ANTI HBS**
- Intervalos maiores não demandam mais doses
- Doses de reforço NÃO são necessárias

HEPATITE B





Infecção anterior - 3-15% população BR

Características/variáveis	Norte	Nordeste	Centro-Oeste	Sudeste	Sul
Anti-HBc 10 a 69 anos	10,9 (8,9-12,9)	9,1 (7,9-10,4)	4,3 (3,7-4,9)	6,3 (5,3-7,3)	9,6 (8,5-10,7)
Prevalência 10 a 19 anos	0,9 (0,5-1,5)	2,1 (1,4-2,9)	1,3 (0,7-1,8)	0,6 (0,3-1,0)	1,6 (0,8-2,3)
(%) 20 a 69 anos	14,7 (12,2-17,8)	11,7 (10,0-13,3)	12,7 (10,9-14,5)	7,9 (6,6-9,2)	11,3 (9,9-12,7)
HBsAg 10 a 69 anos	0,8 (0,2-1,0)	0,4 (0,2-0,7)	0,3 (0,2-0,5)	0,3 (0,1-0,5)	0,5 (0,2-0,8)
Prevalência 10 a 19 anos	0,0	0,1 (0,0-0,3)	0,2 (0,0-0,3)	0,0	0,2 (0,0-0,4)
(%) 20 a 69 anos	0,9 (0,3-1,5)	0,5 (0,2-0,9)	0,6 (0,3-1,2)	0,4 (0,1-0,7)	0,6 (0,2-0,9)
Endemicidade	baixa	baixa	baixa	baixa	baixa

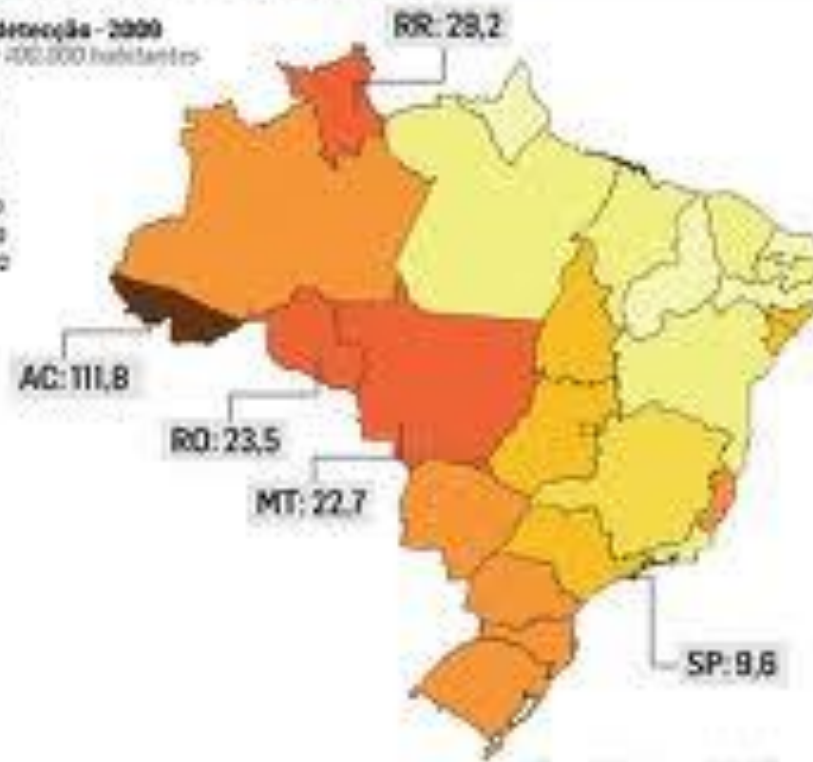
Fonte: UNIVERSIDADE de Pernambuco. Núcleo de Pós-Graduação. Estudo de prevalência de base populacional das infecções pelos vírus das hepatites A, B e C nas capitais do Brasil. Relatório de Pesquisa. Brasil, 2010.

Infecção crônica – 0.1-0.9% população BR

INCIDÊNCIA DE HEPATITE B NOS ESTADOS

Taxa de detecção - 2009

casos por 100.000 habitantes



Casos acumulados

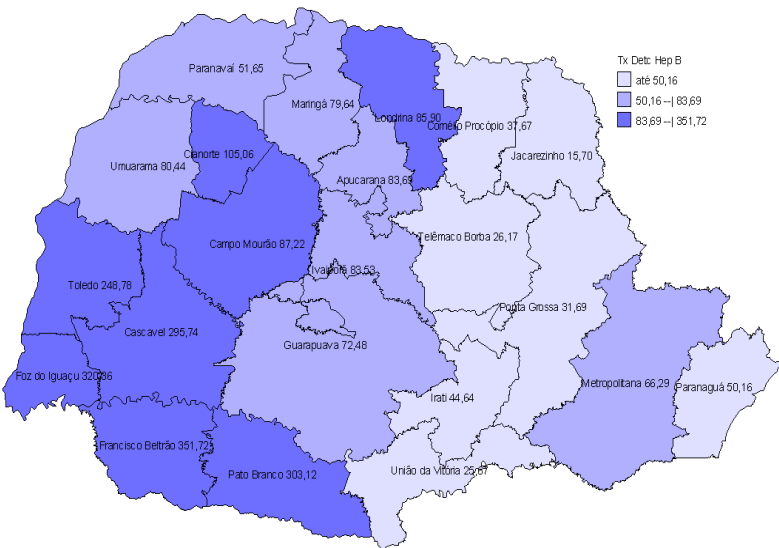
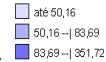
2008	2009
13.389	14.601

Óbitos

2008	2009
565	461

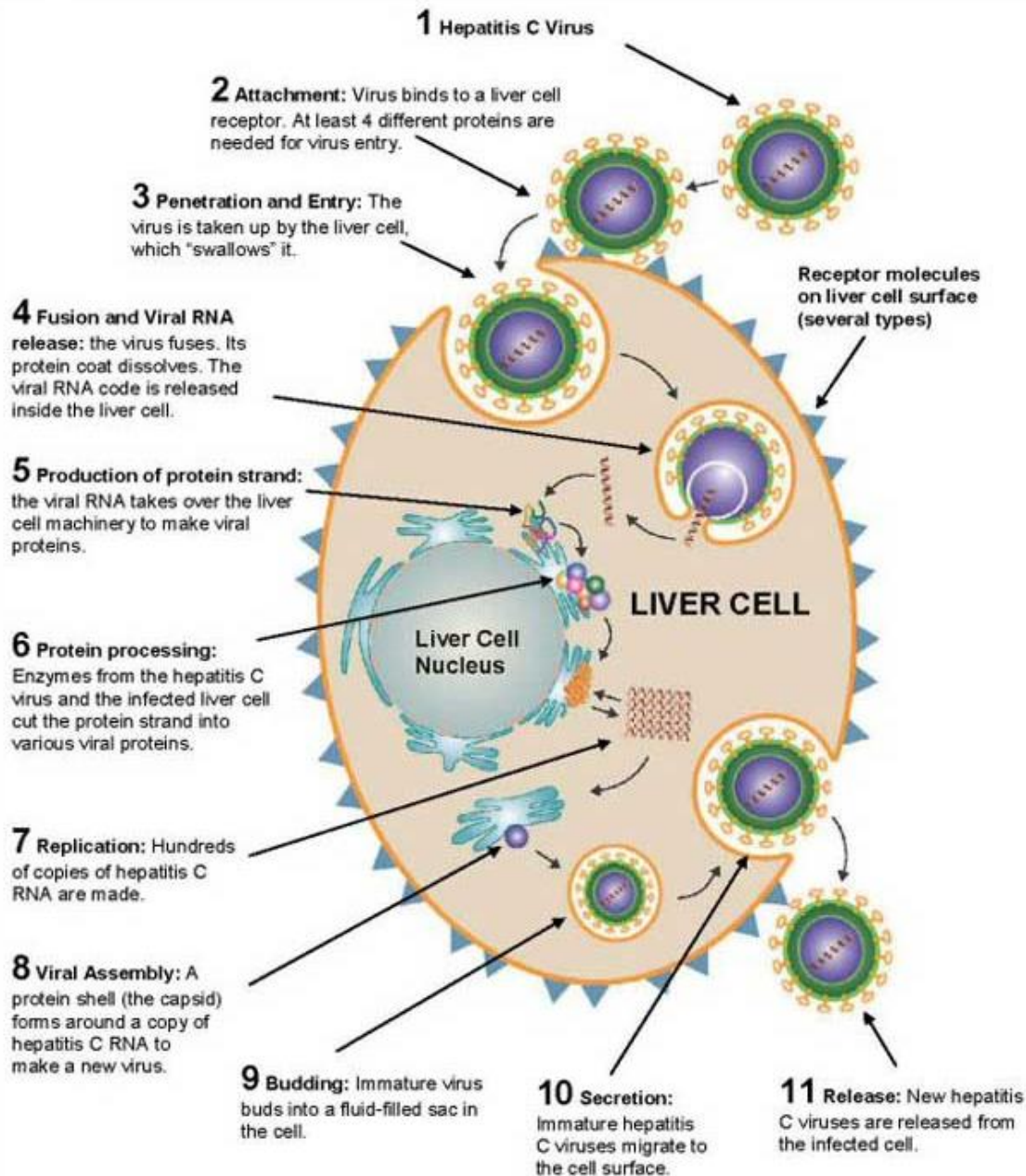
Fonte: Ministério da Saúde/Departamento de DST, Aids e Hepatites Virais

Tx Det: Hep B

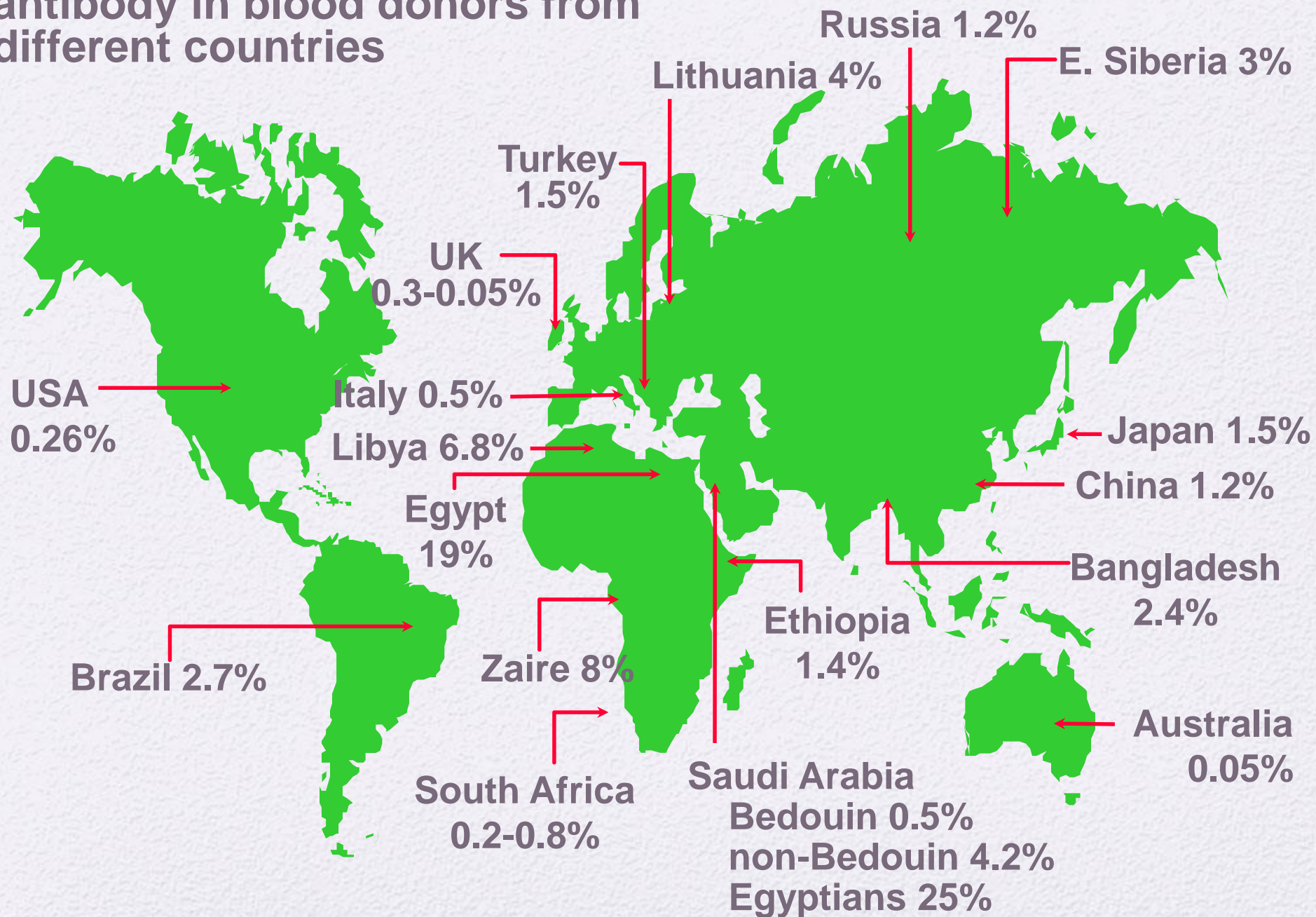


FONTE SESA

HEPATITE C



Published prevalences of hepatitis C antibody in blood donors from different countries



E dentro do hospital?!



... todo cuidado é pouco

Caso clínico

- Médica intensivista de 57 anos
- admitiu um paciente com HDA, choque hipovolêmico e encefalopatia hepática
- teve um acidente percutâneo ao coletar gasometria arterial
- Qual a conduta?

Paciente fonte x susceptibilidade do profissional

- **Paciente cirrótico:**
 - Sorologias (teste rápido) HBV e HCV
- **Susceptibilidade do profissional exposto**
 - Permanecia com anti Hbs <10UI/ml após 2 esquemas vacinais completos
- Qual a conduta?

Alto risco

- Paciente HbsAg + e profissional susceptível
- Imunoglobulina EV agora e repete em 30 dias
 - O quanto antes, em até 7 dias
 - IM
 - 500UI
- Imunoglobulina Humana Anti-Hepatite B apresenta-se em frascos-ampolas com dose única de 200U.I. ou 500U.I.
 - cada frasco-ampola: 200U.I. e 500U.I
 - 1ml = 100mg = 100UI

Paciente fonte x susceptibilidade do profissional

- **Paciente HbsAg +**
- **Susceptibilidade do profissional exposto**
 - Fez esquema vacinal mas não dosou anti hbs
- Qual a conduta?

Alto risco

- Paciente HbsAg + e profissional potencialmente susceptível
- Dosar anti Hbs (viável em <24h-72h)
 - >10 UI/ml - ok
 - <10 UI/ml – imunoglobulina + esquema vacinal

CONDUTA – HEPATITE B

- Prevenção primária = vacina
- Profilaxia pos exposicao em profissionais sem resposta a 2 esquemas vacinais ou naqueles com **anti Hbs** desconhecido = IGHB em até 7 dias

Caso clínico

- Funcionária da higienização, por várias vezes teve acidente perfurante
- Anti hbs 321UI/ml, anti HIV negativo, anti HCV negativo há 40 dias
- Nova perfuração ao fechar caixa de perfurocortantes – agulha com sangue na luz
- Qual a conduta?

CONDUTA – HEPATITE C

- Hepatite B - OK
- Rever sorologias HIV e sífilis
- Anti HCV
- Repetir sorologias HIV e HCV em 30 dias
- Repetir sorologias HIV e HCV em 90 dias e 6m

desfecho

- Icterícia após 40 dias
- Anti HCV +
- PCR em 6 semanas do acidente – 976UI/ml, TGP 856mg/dl e TGO 655mg/dl
- Genótipo 1a
- PCR em 3 meses – 421UI/ml, TGP 89mg/dl
- PCR em 6 meses – 291UI/ml

Conduta?

- Interferon convencional 3M UI 3x/semana e ribavirina 15mg/kg por 24 semanas
- RVR
- RV em 6m
- RVS

Poderia ter esperado?

- Clearance espontâneo de HCV em 20-40% dos casos em 6 meses
- A maioria dos casos são assintomáticos
- Como não há outra medida preventiva eficaz, é necessário acompanhamento para o profissional ter a chance de tratamento precoce.

Am J Orthop (Belle Mead NJ). 2014 Jun;43(6):E117-23.

Risk of hepatitis C virus exposure in orthopedic surgery: is universal screening needed?

DelSole EM, Mercuri JJ, Stachel A, Phillips MS, Zuckerman JD1.

Abstract

The aging baby boomer generation will soon start using tremendous orthopedic surgical resources. This group has also been identified as a group at high risk for having undiagnosed hepatitis C virus (HCV) infection. We conducted a study to assess the prevalence of HCV among orthopedic surgery patients at our institution-using their demographic data to determine whether they represent a unique cohort at high risk for having undiagnosed HCV. We estimated that we operated on as many as 233 patients with undiagnosed HCV in 2011. A cost-effective, universal preoperative HCV screening program may reduce the risk for occupational exposure in orthopedic surgery and significantly benefit public health by bringing undiagnosed patients to treatment. A robust screening program requires several ethical considerations. By offering routine screening to patients, orthopedic surgeons have an opportunity to maintain intraoperative safety and improve the health of the public.

The use of peginterferon in monotherapy or in combination with ribavirin for the treatment of acute hepatitis C.

Nunnari G1, Montineri A, Portelli V, Savalli F, Fatuzzo F, Cacopardo B.

Abstract

BACKGROUND:

Acute hepatitis C becomes chronic in 50% of cases. Early treatment seems to be effective in eradicating HCV infection, although no clear recommendations are available in terms of time of initiation, regimen and duration of therapy. We report a retrospective review of 48 patients with acute HCV infection between January 2006 and December 2007.

PATIENTS AND METHODS:

This multicenter retrospective study involved three Infectious Disease Units in Sicily and was carried out in three stages: (1) Collection of patients data; (2) Selection of patients according to: elevated ALT (at least 5 times above normal values), seroconversion from negative to positive anti-HCV status; (3) Final selection of patients with a minimum of 12 months follow-up.

RESULTS:

Out of 60 patients with a diagnosis of acute HCV infection, 48 were eligible for the study. In 13 subjects (52%) of the 25 who were not treated, the disease resolved spontaneously. 23 patients received pegylated interferon in monotherapy or in combination with ribavirin. 95% achieved a sustained virological response (SVR). Of the 22 sustained responders, 17 (70%) negativized HCV RNA within 8 weeks. No difference appeared between patients receiving monotherapy and those treated with combination therapy. Also, no difference was observed, in terms of SVR, between the two different pegylated interferons given for treatment.

CONCLUSIONS:

The rate of viral clearance was higher in the treated group versus the untreated one (95% versus 52%). The SVR found in our study population (95%) was comparable to that reported in other studies. The combination with ribavirin did not appear to impact our sustained response rate, although ribavirin appeared to induce a faster normalization of ALT levels.

Hepatology. 2014 Jun;59(6):2101-9. doi: 10.1002/hep.26991. Epub 2014 Apr 29.

Acute hepatitis C: a 24-week course of pegylated interferon α -2b versus a 12-week course of pegylated interferon α -2b alone or with ribavirin.

Santantonio T1, Fasano M, Sagnelli E, Tundo P, Babudieri S, Fabris P, Toti M, Di Perri G, Marino N, Pizzigallo E, Angarano G; Acute Hepatitis C Study Group.

Abstract

Therapy of acute hepatitis C (AHC) has not yet been standardized and several issues are still unresolved. This open, randomized, multicenter trial aimed to assess the efficacy and safety of a 24-week course of pegylated IFN (Peg-IFN) alpha-2b versus a 12-week course of Peg-IFN alpha-2b alone or with ribavirin (RBV) in AHC patients. One hundred and thirty HCV acutely infected patients who did not spontaneously resolve by week 12 after onset were consecutively enrolled and randomized to receive Peg-IFN alpha-2b monotherapy (1.5 μ g/kg/week) for 24 or 12 weeks (arm 1, n = 44 and arm 2, n = 43, respectively) or in combination with RBV (10.6 mg/kg/day) for 12 weeks (arm 3, n = 43). The primary endpoint was undetectable HCV RNA at 6-month posttreatment follow-up (sustained virological response; SVR). All patients were followed for 48 weeks after therapy cessation. HCV RNA levels were determined by real-time polymerase chain reaction (limit of detection: 15 IU/mL) at the central laboratory at baseline, week 4, end of treatment, and 6 and 12 months posttreatment. Using an intent-to-treat analysis, overall SVR rate was 71.5%. In particular, an SVR was achieved in 31 of 44 (70.5%), 31 of 43 (72.1%), and 31 of 43 (72.1%) patients in arms 1, 2, and 3, respectively (P = 0.898). Sixteen patients (12.3%) prematurely discontinued therapy or were lost to follow-up; thus, sustained response rates with per-protocol analysis were 81.6%, 81.6%, and 81.6% for patients in arms 1, 2, and 3 respectively. With multivariate analysis, virologic response at week 4 of treatment was an independent predictor of SVR. Peg-IFN alpha-2b was well tolerated.

CONCLUSION:

Peg-IFN alpha-2b induces a high SVR in chronically evolving AHC patients. Response rates were not influenced by combination therapy or treatment duration.

CONCLUSÕES

Following a percutaneous exposure to HCV-infected blood, what action(s) is/are recommended?

- A. Test the exposed person for antibody to HCV and alanine aminotransferase (ALT) at the time of the exposure and 4–6 months postexposure.
- B. Administer one dose of immune globulin within 7 days of the exposure.
- C. Immediately start PEP with interferon and ribavirin.
- D. All of the above.
- E. None of the above.

CONCLUSÕES

After completing the initial 3-dose vaccine series against HBV, HCP who will have contact with patients or blood and are at ongoing risk for percutaneous injuries should have anti-HBs testing completed

- A. Every year.
- B. After any blood exposure.
- C. 1–2 months after the completion of the vaccine series.
- D. All of the above.
- E. None of the above

CONCLUSÕES

Following an exposure to a bloodborne pathogen, what information would be included as part of the postexposure counseling? (Indicate all that apply.)

- A. HCP exposed to HBV and HCV do not need to take any special precautions to prevent secondary transmission during the follow-up period.
- B. Modifying an exposed person's patient care responsibilities is not necessary to prevent transmission to patients after an exposure to HBV, HCV, or HIV.
- C. HCP should seek medical evaluation for any acute illness that occurs during the follow-up period.