2. Hepatitis A vaccine and post-exposure prophylaxis

2a) Inactivated hepatitis A vaccine versus no intervention

Author(s): Wiersma S, Irving G, Ott J, Holden J
Date: 2011-06-29
Question: Should use of inactivated hepatitis A vaccine in family contacts of confirmed cases versus no intervention be used for hepatitis A prevention?
Settings: Trial

Quality assessment							No of patients		Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Use of inactivated hepatitis A vaccine in family contacts of confirmed cases	No intervention	Relative (95% CI)	Absolute		
hepatitis A (follow-up mean 45 days; assessed with: clinical and laboratory criteria)												
1	randomized trial	serious[1]	no serious inconsistency	no serious indirectness	no serious imprecision	none	2/197 (1%)	12/207 (5.8%)	RR 0.18 (0.04 to 0.77)	79% efficacious compared to no intervention.	⊕⊕⊕O MODERATE	CRITICAL

[1] Sequence generation was unclear, allocation concealment was inadequate, blinding was unclear, and incomplete outcome data was reported.

Reference

Sagliocca L, Amoroso P, Stroffolini T, Adamo B, Tosti ME, Lettieri G, Esposito C, Buonocore S, Pierri P, Mele A. Efficacy of hepatitis A vaccine in prevention of secondary hepatitis A infection: a randomised trial. Lancet 1999; 353:1136-9.

2b) Inactivated hepatitis A vaccine versus IG

Author(s): Wiersma S, Irving G, Ott J, Holden J
Date: 2011-06-29
Question: Should use of inactivated hepatitis A vaccine in contacts of confirmed cases versus immunoglobulins (IG) be used for post-exposure prevention of hepatitis A?
Settings: Trial

Quality assessment							No of patients		Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Use of inactivated hepatitis A vaccine in contacts of confirmed cases	Immuno-globulins (IG)	Relative (95% CI)	Absolute		
hepatitis A (follow-up 4-8 weeks; assessed with: clinical and laboratory criteria)												
1	randomized trial	no serious risk of bias	no serious inconsistency	no serious indirectness	no serious imprecision[1]	none	25/568 (4.4%)	17/522 (3.3%)	RR 1.35 (0.7 to 2.67)	NOTE[2]	⊕⊕⊕⊕ HIGH	CRITICAL

RR= Relative Risk (95% CI)

[1] Criterion of noninferiority met; no significant differences between IG and inactivated hepatitis A vaccine in clinical or subclinical hepatitis A. Risk of hepatitis in vaccine group never >1.5% than in IG group.
[2] Absolute vaccine efficacy not assessed.

Reference

Victor JC, Monto AS, Surdina TY, Suleimenova SZ, Vaughan G, Nainan OV, Favorov MO, Margolis HS, Bell BP. Hepatitis A vaccine versus immune globulin for postexposure prophylaxis. N Engl J Med 2007; 357:1685-94.