Hepatitis A Fulminant Hepatic Failure: follow up of pediatric patients in Southern Brazil

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Miami 2007
Viral hepatitis A is an important health problem worldwide. It is the most prevalent type of viral hepatitis in Latin America.

The development of a vaccine to prevent viral hepatitis A is a major scientific progress.

However, morbidity and lethality resulting from this disease persist.
Acute liver failure (ALF) caused by Hepatitis A virus (HAV) is a rare yet devastating condition with high mortality rates.

Although efficacious vaccines are licensed in many countries, their use has been limited by cost and other considerations.

In Brazil there is no universal recommendation for HAV immunization.
There is a large variability in the serum prevalence of HAV in Latin America with lots of existing areas with high contrasting with low prevalence.
Prevalence of anti-HAV antibody in 2 groups of different socio-economic levels in Porto Alegre

GED – Ferreira CT, 1996
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**Objective:**

The aim of this study was to follow-up pediatric patients with HAV ALF hospitalized in a liver transplant unit in the last 10 years.
Methods:

- A retrospective analysis was made of 33 children and adolescents with ALF who had been treated in a liver transplant unit in the last 10 years.

- Ages varied between 2 months and 15 years (median = 6.2 +/- 5.3 years) and 21 (64%) were males.

- ALF was defined as biochemical evidence of liver injury, without previous known liver disease and uncorrectable coagulopathy - Protrombin time (PT) > 15 sec or INR > 1.5 with encephalopathy (EN) or PT > 20 sec or INR > 2.0 without EN.
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Results of 33 children with ALF:

• 13 patients were IgM anti-HAV positive (39.4%).

• 11 cases (33%) were of indeterminate etiology.

• HAV ALF children were between 17 months and 15.6 years old (median= 5.8 +/- 4.6 years)

• 8 were males (61.5%)
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**Results of 13 HAV ALF:**

- All patients were on the list for urgent liver transplants:
  - 5 died waiting for an organ (38.5%)
  - only one patient recovered spontaneously
  - 7 patients received a liver transplant: 3 died in the post-op period and 1 died 45 days after surgery
  - 3 children are alive: 1, 2 and 5 years after the transplant
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Etiology of 33 cases of ALF

- HAV: 39.4%
- AIH: 6.1%
- VOD: 30.3%
- Tirosinemia: 6.1%
- Leptospirosis: 6.1%
- HBV: 3.0%
- Without etiology: 3.0%
- Wilson: 3.0%
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Follow-up of patients with HAV Acute Liver Failure

- Death without LTx: 4
- Death after LTx: 3
- LTx - alive: 1
- Recovered: 5
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Conclusion:

- HAV was the most frequent cause of ALF with a high rate of mortality

- These results suggest universal vaccination against HAV could be a good strategy in this part of the world.