Resurgent acute HBV hepatitis

Â Previously cured or resolved individuals:
  HBsAg- anti-HBe + asymptomatic carriers, HBsAg- anti-HBc + low-titer-positive, anti-HBs + resolved HBV infection cases

Â Issues in lymphoma with rituximab and chemo, several fatalities.

Â Proportional to immunosuppression

Â Increased awareness, testing for DNA pre chemoRx and anti-viral Rx commenced
Liver transplantation

Å Role of immunosuppression in HCV ĭ not completely clear: Donor age, numbers of rejection episodes, level of suppression
Å FCH type reaction with massive HBV viral load
Å Steroids ĭ risk factor for fatty liver disease
Five-year unadjusted patient survival by aetiology of liver disease (2000-2010)

<table>
<thead>
<tr>
<th>Aetiology</th>
<th>% Survival (95% CI)</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cancer</td>
<td>68.7 (64.0 – 73.0)</td>
<td>666</td>
</tr>
<tr>
<td>HCV</td>
<td>72.9 (67.7 – 77.4)</td>
<td>471</td>
</tr>
<tr>
<td>ALD</td>
<td>76.6 (72.9 – 79.8)</td>
<td>864</td>
</tr>
<tr>
<td>HBV</td>
<td>86.9 (77.4 – 92.5)</td>
<td>91</td>
</tr>
<tr>
<td>PSC</td>
<td>79.5 (74.5 – 83.5)</td>
<td>411</td>
</tr>
<tr>
<td>PBC</td>
<td>83.0 (79.1 – 86.2)</td>
<td>524</td>
</tr>
<tr>
<td>AID</td>
<td>77.4 (72.3 – 81.6)</td>
<td>400</td>
</tr>
<tr>
<td>Metabolic</td>
<td>77.8 (68.3 – 84.8)</td>
<td>135</td>
</tr>
<tr>
<td>Other</td>
<td>80.0 (73.3 – 85.3)</td>
<td>246</td>
</tr>
</tbody>
</table>

Log-rank p-value=0.001
Biopsies from 2 similar patients

Case 1

8 months

5 years

Case 2

5 months

20 months
Fibrosing Cholestatic Hepatitis

Originally description of a form of HBV recurrence following liver transplantation. *Davies, Hepatology 1991.*

A rapidly progressive form of injury with liver failure and death in 4-6 weeks.

A era pre immunotherapy or anti-viral therapy — now extinct. Was up to 40% of recurrent HBV cases *Xiao, Int J Clin Exp Pathol 2008*

A associated with massively high levels of viral replication
Fibrosing cholestatic hepatitis

Expanded portal tracts
Portal expansion little inflammation

Periportal ductular reaction
FCH

Large eosinophilic cells, kupffer cells

cholestasis
FCH

Orcein stain of ground glass hepatocytes

Hepatitis B core antigen - nuclear, some cytoplasmic
FCH

Â Subsequently described in renal transplant patients, rarely cardiac transplant, HIV and post-chemotherapy reactivation, with IS in connective tissue disorder.

Â A similar pathology also seen with some HCV cases, post liver and renal transplantation, HIV.
Cholestatic HCV recurrence
Cholestatic HCV
Cholestatic HCV
Hepatitis E virus

Recognized in 80s, non-enveloped RNA virus in hepevirus genus; NOT recognised its global importance

Most frequent acute viral hepatitis infection, about 1/3 population has been infected! (WHO 2012)

Implicated in epidemics with high mortality in pregnant females in Europe in 18th century, later in Asia & Africa (Dalton Sem Liv Dis 2012)