open.michigan

Author(s): Rebecca W. Van Dyke, M.D., 2012

University of Michigan

Attribution Key

for more information see: http://open.umich.edu/wiki/AttributionPolicy

Use + Share + Adapt

{ Content the copyright holder, author, or law permits you to use, share and adapt. }

Public Domain – Government: Works that are produced by the U.S. Government. (17 USC § 105)

Public Domain – Expired: Works that are no longer protected due to an expired copyright term.

Public Domain – Self Dedicated: Works that a copyright holder has dedicated to the public domain.

Creative Commons – Zero Waiver

Creative Commons – Attribution License

Creative Commons – Attribution Share Alike License

Creative Commons – Attribution Noncommercial License

Creative Commons – Attribution Noncommercial Share Alike License

GNU – Free Documentation License

Make Your Own Assessment

{ Content Open.Michigan believes can be used, shared, and adapted because it is ineligible for copyright. }

Public Domain – Ineligible: Works that are ineligible for copyright protection in the U.S. (17 USC § 102(b)) *laws in your jurisdiction may differ

{ Content Open.Michigan has used under a Fair Use determination. }

Fair Use: Use of works that is determined to be Fair consistent with the U.S. Copyright Act. (17 USC § 107) *laws in your jurisdiction may differ

Our determination **DOES NOT** mean that all uses of this 3rd-party content are Fair Uses and we **DO NOT** guarantee that your use of the content is Fair.

To use this content you should **do your own independent analysis** to determine whether or not your use will be Fair.

Rebecca W. Van Dyke, M.D.
M2 GI Sequence

Approach to Liver Disease: Hepatocellular vs Cholestatic Disease

Thursday Feb 2, 2012, 9:10.- 10:00 A.M.

Friday, February 3, 2012, 9:10-10:00 a.m.

Learning Objectives

At the end of these two lectures the student should be able to:

1. Define cholestatic and hepatocellular liver disease, provide examples of both and be able to interpret panels of liver tests.
2. Define the difference between intrahepatic and extrahepatic cholestasis and outline approaches to distinguishing them.
3. Define the pathophysiology of representative cholestatic diseases, including drug-induced cholestasis, primary biliary cirrhosis, primary sclerosing cholangitis and bile duct obstruction.
4. Outline an approach to the evaluation of the jaundiced patient.
5. Define acute and chronic hepatocellular liver disease and provide representative examples.
6. Provide a differential diagnosis for a patient with liver tests indicating hepatocellular disease and discuss an approach to definitive evaluation.
7. Be able to interpret serologic tests for hepatitis A, B, C, D and E.

Key words: Fulminant liver failure, acute hepatitis, hepatitis A, B and C.

Reading Assignment:

Cecil Essentials of Medicine, 8th edition, 2010:

Relevant sections of chapters 41-44, especially chapter 43
Chapter 64, pp 651-654 (Wilson's disease and hemochromatosis)
(7th Edition, 2007: Chapters 40-43, Chapter 62, pp 625-628)

Purpose of lecture:

I discussed liver function and tests of liver injury/liver function earlier this week. We will use these tests to identify and analyze types of liver disease. It is helpful to think of two broad catagories of liver disease: cholestatic and hepatocellular.

There are some uncommon diseases that primarily attack other cells in the liver such as sinusoidal endothelial cells, small veins/arteries or the resident macrophages, the Kupffer cells. We will not deal with these today as the general approach I will review today will allow you to approach and understand most of the liver diseases you will run into in whatever area of medicine you enter.

Recent articles that may be of interest (FYI):

1. Emerson and Purcell. Running like water – the omnipresence of hepatitis E.
   New England Journal of Medicine 351:2367, 2004.

2. Shrestha et al. Safety and efficacy of a recombinant hepatitis E vaccine.
   New England Journal of Medicine 356:895, 2007.
   Accompanying editorial NEJM 356:949, 2007.

3. Victor et al. Hepatitis A vaccine versus immune globulin for postexposure prophylaxis.
   New England Journal of Medicine 357:1685, 2007.

4. Jules Dienstag. Hepatitis B Virus Infection: Drug Therapy.
   New England Journal of Medicine 359:1486-1500, 2008.