

DIFFERENTIAL DIAGNOSIS UNIT

Understanding Articles about Differential Diagnosis

The Case of the Unexpected Abdominal Mass

Objectives:

After working through this package, you should be able to:

1. Learn approaches to find information about disease probability to inform our differential diagnosis and assess the limitations that exist in the literature.
2. Identify when you might pursue original research evidence about differential diagnosis.
3. Interpret disease probability estimates and consider how they might influence your clinical decision-making.

Assignment:

Reflect on this clinical scenario, read the article by Golden & Feusner, review the chapter on assessing articles about differential diagnosis, and complete the worksheet to discuss with your colleagues.

Clinical Scenario:

Sandra is a bright, active 6-year-old girl with an unremarkable past medical and family history, who comes to your family practice office with a case of possible chicken pox, for which she was immunized previously.

The clinical presentation and appearance of the rash are classic for a mild case of chicken pox. The exam is benign with the exception of a clearly palpable left lobe of the liver in the epigastrium. There is no associated lymphadenopathy, ascites or edema.

Upon further questioning, mom has not noticed this previously; the child denies tenderness or symptoms of obstruction. There have been no associated B symptoms.

You are quite concerned about this finding. You know hepatomegaly is not a common feature of varicella infection, while you know there are some benign causes of hepatomegaly in children, you are worried about malignancy and wonder how common that is, what are the common malignancies that present this way, and what diagnostic tests you should order to begin the work-up. You order an abdominal ultrasound and resolve to investigate the literature.

Your Search

You enter PUBMED and search the following MESH terms:

abdominal neoplasms/diagnosis*

Child

Diagnosis, differential

A number of articles refer to individual case presentations of different conditions, however the 21st hit looks promising:

Malignant abdominal masses in children: quick guide to evaluation and diagnosis

Golden CB, Feusner JH

Pediatr Clin North AM 2002 49(6): 1369-92

A quick scan shows this is the only recent article in English on this topic. You are disappointed to note the authors limited their evaluation to malignant abdominal masses. You conduct a further search and find there are no optimal differential diagnosis articles with inclusion of non-malignant and malignant etiologies available.

Enclosed Materials:

1. Guyatt G, Roman Jaeschke, Mark Wilson, Victor Montori, and Scott Richardson. What is evidence-based medicine. In Guyatt G, Rennie D, Meade MO, Cook DJ. Users' Guides to the Medical Literature: A Manual for Evidence-based Clinical Practice. 3rd ed. New York, NY: McGraw-Hill; 2015.
 - a. Richardson WS, Wilson MC, McGinn T. Differential Diagnosis Ch 17, Pgs 337-344.
2. Golden CB, Feusner JH. Malignant abdominal masses in children: quick guide to evaluation and diagnosis. Pediatr Clin North AM 2002 49(6): 1369-92.
3. Worksheet for the evaluation of an article on differential diagnosis.