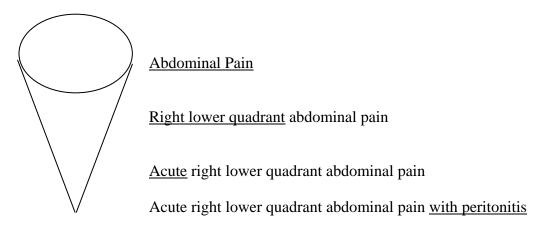
## Use of Differential Diagnosis Systems Chart:

## **Instructions to Students:**

**Differential Diagnosis of** \_\_\_\_\_\_\_\_. Think about what you are generating the differential diagnosis for, and write it in the blank. Decide whether you want to be more narrow or more inclusive. More often, narrowing the topic down is more valuable. For example, I don't want to generate the differential diagnosis for "abdominal pain", if the patient has "right lower quadrant abdominal pain". The latter will help me get to my answer faster. There will be fewer conditions to test for or to look up in a book if I need more information. Sometimes we can narrow the differential down further, for example, "*acute* right lower quadrant abdominal pain". Essentially, we took "Abdominal pain" and looked for adjectives or descriptors. We only chose those descriptors that that are good discriminators. The location was extremely helpful as was the timing. I would not add the adjective, "sharp" because it does not help lead me down a certain path. It is not a good branch point.

## THE CONE



**Memory aid:** The chart is one way of organizing a differential diagnosis. The purpose of this kind of strategy is to help you expand your differential. It helps you pull out what you already know.

**Be practical**: Try filling in the chart below. Some categories may not be relevant to a particular chief complaint and, thus, should be left blank. It is not necessarily a good idea to write a "complete" list of every disease that causes the complaint you have written. Make sure you include the common conditions as well as conditions one might "reasonably" see, for example: if the chief complaint is chronic cough, cystic fibrosis, which is not a common disease, should be included because it is one that every practitioner is likely to see at some point. You might also write a disease that you particularly would not want to miss. Additionally, for categories like metabolic, drug, toxin, etc. include (if it is relevant) at least one prototype condition exemplifying the category, i.e., if the chief complaint was coma, you might include carbon monoxide under "Toxins". If there are other common toxins causing coma you should include it, otherwise the one example will suffice.

**Narrow down the differential to a particular system**: The chart is also helpful in narrowing down the differential. For example, if I have a patient with an acute history of vomiting and we use the above chart, it may remind us that you can get vomiting from increased intracranial pressure and not just from GI diseases. At this point I don't need to have an exhaustive list of CNS pathology, rather, I need to be able to figure out whether or not a CNS condition is likely. If it is likely (patient has first morning headaches and vomiting, and double vision), then I can expand the list of possible CNS conditions. If it looks more like a primary GI problem I can expand that list.

Differential Diagnosis of :				
CNS	Psych	Eyes	Ears	Nose
Throat	Pulmonary	Cardiovascular	GI	GU
Musculo- Skeletal		<u>M</u> etabolic	<u>A</u> llergic/ <u>A</u> utoimmune	<u>T</u> oxins/ <u>T</u> rauma
<u>C</u> ongenital	<u>H</u> eme	<u>E</u> ndo	<u>D</u> rugs	

**When to think, "Metabolic"**: Recurrent vomiting, poor feeding, failure to thrive, lethargy, developmental regression, unexplained bouts of dehydration and acidosis, afebrile seizures, unusual body odor or urine odor, young family member with unexplained death, hypoglycemia especially without ketosis, and organomegaly.

**When to think, "Genetic" ("Congenital")**: Any major dysmorphism, multiple minor dysmorphisms, or involvement of 2 or more organ systems. Remember: Development is a system (mental retardation, developmental delay, autism). Growth is a system (failure to thrive, short stature (esp. in girls), overgrowth, asymmetric growth.

Certain behavioral conditions are common (LD, ADD, and behavior problems). These can also be secondary to "genetic" conditions. When faced with a child with one of these behavioral conditions, when should you think "genetic"? Think "genetic" if you have an atypical clinical course. For example, if the child's ADD or behavior problem is very severe consider other possibilities. If the child does not respond to good therapy (a good family who are doing everything right yet there is no improvement in the behavior, think "genetic". Additionally, if you have any of these behavioral conditions plus any dysmorphisms, think "genetic".