

Approach to infants and young children surgical abdomen

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Objectives

- ▶ Realize the impact of age
 - ▶ Where/who are the history sources
- ▶ Recognize and interpret the
 - ▶ important symptoms
 - ▶ Important signs

History

The impact of age

- ▶ **Less than 3–4 year**
 - **Difficult to communicate**
 - Verbal expression
 - Fear of strangers
 - **History sources**
 - Mother is the best source
 - Social barrier less than what we expect
 - Father → Less reliable
 - Nurses → reliable
 - Not always possible
 - Important in PICU/ NICU
 - Other doctors

Symptoms of surgical abdomen

▶ Feeding & Growing

- Feeding well and growing → healthy baby
- Poor feeding
 - Sick baby → from any GI or systemic cause (ear infection)
 - GI obstructed
 - Pain

▶ Persistent vomiting → Sick baby

- Frequency
- Color
 - Milk vs greenish
- Force
 - Projectile → proximal obstruction
 - Small amount after each feeds → regurgitation → normal as long as gaining wt

Symptoms of surgical abdomen

▶ Bowel movement (BM)

◦ Frequency

- What is the normal for infant?
- Constipated, obstructed
- Failure to pass meconium in newborns

◦ Consistency

- Loose / watery → diarrhea
- Firm & dry → constipation

◦ Color

- Very pale → ?
- Black → ?
- Bright red → ?

Symptoms of surgical abdomen

▶ Crying baby

- **Babies communicate their needs by crying**
 - Hungry
 - Wet
- **At >6 month → they learn to cry for other reasons**
 - Want to be carried
 - Want to play
- **Bay who continue to cry, refuse feeding and dry → pain**
 - Abdominal pain
 - Ear ache

Non-crying baby can be worrisome !!!

Symptoms of surgical abdominal illnesses

▶ Development

- **Physical growth (height and weight)**
 - Chronic problems (Metabolic, Nutrition => gut health)
- **Psychological**
 - Mental problem, chromosomal abnormalities
- **Motor**
 - Syndrome
 - Metabolic

Relayed symptoms (by parents)

- ▶ **External abnormality** → anything that is seen/felt as abnormal by parents
 - **Swelling**
 - Abscess
 - Mass (lymph node, Tumor, Cyst, Hernia)
 - **Color changes**
 - Inflammation
 - Rash
 - Vascular malformation

Relayed symptoms (by parents)


▶ Mental changes

◦ Responsiveness

- Sleepy
- Not interested in feeding
- Indicates; sepsis, shock, CNS trauma, metabolic (O₂, Glu, urea)

Abdominal problems

Combination of symptoms

- ▶ **Vomiting**
 - ▶ **Constipated / diarrhea**
 - ▶ **Poor feeding**
 - ▶ **Abdominal distension**
 - ▶ **Palpable mass (felt by parents)**
 - ▶ **Very dark or very pale colored stool**
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Physical Exam

- ▶ **Vital sings**

- Fever
- RR, BP, HR, O2 Sat

- ▶ **Consciousness (crying)**

- Crying baby → not very sick (not critical)
- Unusually calm baby who doesn't respond normally → sick

Physical Exam

- ▶ **Exam while crying**
 - **Can't hear the chest well**
 - Focus on inhalation
 - **Can't examine abdomen well**
 - Examine while taking breath
 - Keep hand on abdomen
 - **Can't concentrate**
 - Parent are stressed → less time

Physical exam

- ▶ Otherwise similar to adult

History (general skills)

- ▶ A good history = a good logical story

Known major Predisposing factors → Describe the current problem → Other risk factors → Symptoms of other possible complications

Due to the relative difficulties in taking a reliable history and performing an accurate physical exam



We tend to depend more on investigations in diagnosing the underlying problems in infants

Best luck

Question?

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