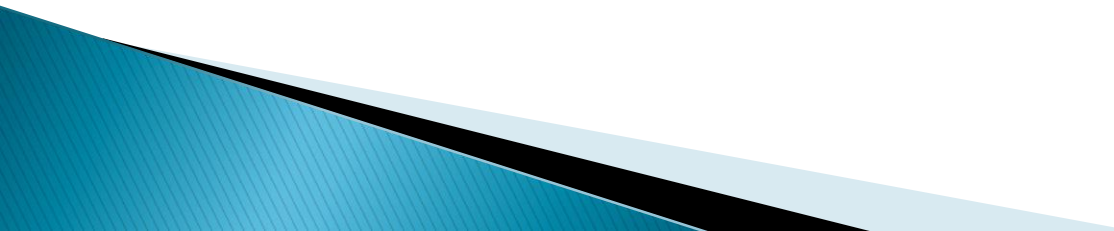


# Approach to infants and young children surgical abdomen

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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 is not very reliable
    - Nurses are 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 → Melena
- 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)

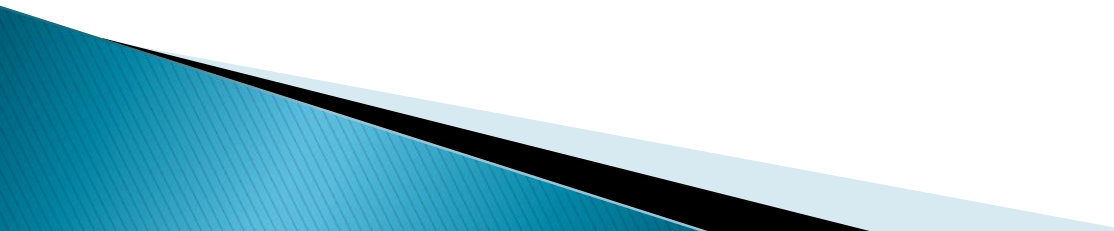
## ▶ Mental changes

### ◦ Responsiveness

- Sleepy
- Not interested in feeding
- Indicates; sepsis, shock, CNS trauma, metabolic (O<sub>2</sub>, 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
- 

# Physical Exam

- ▶ **Vital signs**

- 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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