

Approach to A Crying Infant

KEYWORDS Dr. K. K. Sinha DR. Gautam Kumar Assistant Prof, Dept. Of Pediatrics, J.L.N.M.C, Bhagalpur Senior Resident, Dept. Of Pediatrics AllMS, Patna

Crying is a baby's way of communicating with its parents and the people around.

Crying

- 1. Physiological needs : Hunger, wet diaper, Uncomfortable environment
- 2. Pathological problem

Diagnostic hints

- 1. Clavicular fracture : increased crying on limb abduction
- 2. Hernia / Testicular torsion : Inguinoscrotal swelling.
- Intussusception : Passage of blood, mucus per rectum
 Otitis media / Acute bronchiolitis / Pneumonia : Res-
- piratory symptoms 5. Meningitis : uncontrolled irritability, boggy fontanel
- 6. Acute bacillary dysentery : loose stool

CLINICAL APPROACH - STEP 1

First and foremost, rule out any life-threatening conditions such as

- Severe physical injury
- Testicular torsion
- Obstructed inguinal hernia
- Intussusception

CLINICAL APPROACH – STEP 2

Secondly, rule out any potentially-serious conditions such as

- Otitis media
- Bronchiolitis
- Early stage of meningitis or pneumonia
- Severe myalgia as in dengue and leptospirosis
- Aseptic meningitis in Kawasaki syndrome
- Acute bacillary dysentery
- Metabolic disturbances such as hypernatremia

Major presenting complain Inconsolable cry

- Hunger, Lack of sensory input
- Fracture,
- Obstructed hernia,
- intussusceptions,
- Testicular torsion, GERD

Crying with associated symptoms Fever with

- Hypoxia (Acute Bronchiolitis)
- Ear Pain (Otitis Media)
- Mucoid and bloody stool (Dysentry)
- Pleural pain (Pneumonia)
- Myalgia (Dengue, Kawasaki Ds.)

DIAGNOSTIC HINTS

GERD & FEEDING ERRORS- The classical clues to the probable diagnosis of GERD are

- Recurrent cough
- Regurgitation or vomiting
- Failure to thrive

Feeding errors in an infant may be due to-

- Inadequacy of breast milk
- Bottle-feeding

RECURRENT CRYING EPISODES

Certain conditions can present as recurrent episodes of $\ensuremath{\mathsf{crying}}$, especially cases of

- Chronic diseases
- Intussusception
- Bacillary dysentery

In such conditions, the infant appears to be unhappy and sick.

In infantile colic, there are recurrent episodes of crying but the baby is healthy and grows well.

INFANTILE COLIC - It is characterized by incessant crying during infancy without any identifiable cause and is defined by the "Rule of 3"

Paroxysms of excessive crying in an otherwise healthy baby

- Lasting for more than 3 hours per day
- Occurring for more than 3 days in a week
- For 3 weeks

Incidence rate: 5 to 25% of infants

Gender predisposition: Equal frequency in males and females

Various theories have been propounded to explain the etiology of infantile colic.

- Immaturity of the infant's nervous or digestive system
- Maternal risk factors
- Allergic tendencies
- Behavioral issues
- Pockets of gas due to swallowed air or excess production in the gut
- Hyperperistalsis
- Neurodevelopmental cause

CHARACTERISTICS OF INFANTILE COLIC

- Typically in the early weeks of life
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ORIGINAL RESEARCH PAPER

- Peak occurrence between 6 to 8 weeks of age
- Worse in the late afternoon or evening
- Infant may draw up legs
- Condition usually improves by 3 to 4 months of age

Detailed History

One may be able to assess the gravity of the situation from the nature of the infant's cry.

Quality of cry	Interpretation
Lusty and vigorous	Usually reassuring as in colicky babies
Feeble and whining	Weak, debilitated or seri- ously ill
Screeching high pitched cry	CNS disease
Hoarse low pitched cry	Upper airway disease
Cry in response to frighten- ing or noxious stimuli	Usually well/moderately ill with a benign process
Constant with little or no consolation	Seriously ill

Physical Examination

Parameters to be considered during physical examination

- Activity and alertness of the baby
- Eye contact
- Ability to be comforted
- Spontaneous movements of the extremities
- Body weight
- Temperature
- Pulse
- Respiratory rate and pattern
- Blood pressure

NON-PHARMACOLOGICAL MANAGEMENT OF INFAN-TILE COLIC

General Management

- Parental assurance
- Maternal dietary changes
- Switching to soy-based formulas in bottle-fed babies
- Use of hypoallergenic formulas

Rhythmic Calming Techniques (5 Ss)

- Swaddling with allowing the baby's hips to be flexed
- Side or Stomach holding to calm the fussy baby
- Making a Strong Shush sound near the baby's ear
- Swinging the baby with tiny jiggly movements by always supporting the head and neck
- Letting the baby Suckle on the breast, or a pacifier

PHARMACOLOGICAL MANAGEMENT OF INFANTILE COLIC

Allopathic therapies-

- Simethicone
- Camylofin
- Dicyclomine
- Probiotics

SUMMARY-

- Crying is a baby's way of expressing itself to gratify physiological needs such as hunger or mild discomfort.
- At times, it may denote frustration or pathological conditions like pain or cerebral irritation due to multiple causes.
- A structured clinical approach helps to differentiate between physiological and pathological problems and directs the action plan.

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• The empirical use of drugs must be avoided, as rational management is possible only if a proper diagnosis is arrived at.

References

- Barr R (1998)Colic and crying syndromes in infants. PediatricsVol. 102 No.Supplement E1, pp. (1282 -1286)
- Bell SM and Ainsworth MD (1972). Infant crying and maternal responsiveness Child Development(43, 1171-1190).
- BowlbyJ(1958)The nature of the child's tie to his mother. International-Journal of Psychoanalysis (39, 350-373)
- McKenna J and McDada T (2005) Why babies should never sleep alone: A review of the co-sleeping controversy in relation to SIDS, bed sharing and breast feeding. Paediatric Respiratory Reviews6 (2).
- Hertzman C (2000). The case for an early childhood developmental strategy. Isuma. Canadian Journal of Policy Research1(2),11-18
- Middlemiss W et al. (2011).Asynchrony of mother-infant hypothalamic-pituitary- adrenal axis activity following extinction of infant crying responses induced during the transition to sleep.Early Human Development63(4),(227-232.)
- Perry BD and Pollard R (1998). Homeostasis, stress, trauma, and adaptation: a neurodevelopmental view of childhood trauma. hild and Adolescent Psychiatric Clinics of North America 7, (33-51.)
- Price A et al. (2012) .Outcomes at six years of age for children with infant sleep problems: Longitudinal communitybased study. Sleep Medicine(13 (8), 991-9)