cause of crying in infants is unexplained. If the condition began before 3 weeks' corrected age, the crying has a diurnal pattern consistent with colic (afternoon and evening clustering), the infant is otherwise developing and thriving, and no organic cause is found, a diagnosis of colic is indicated.

Treatment

The management of colic begins with education and demystification. When the family and the physician are reassured that the infant is healthy, without infection, trauma, or underlying disease, education about the normal pattern of infant crying is appropriate. Learning about the temporal pattern of colic can be reassuring; the mean crying duration begins to decrease at 6 weeks of age and decreases by half by 12 weeks of age. Colic does not always resolve by 3 months of age. Approximately 15% of infants with colic continue to have excessive crying after 3 months of age.

Helping families develop caregiving schedules for the infant's fussy period is useful. Techniques for calming infants include soothing vocalizations or singing, swaddling, slow rhythmic rocking, walking, white noise, and gentle vibration (e.g., a ride in a car). Giving caregivers permission to allow the infant to rest when soothing strategies are not working may alleviate overstimulation in some infants; this also relieves families of guilt and allows them a wider range of responses to infant crying. **Avoidance** of dangerous soothing techniques, such as **shaking the infant** or placing the infant on a vibrating clothes dryer (which has resulted in injury from falls), should be stressed.

Medications, including phenobarbital, diphenhydramine, alcohol, simethicone, dicyclomine, and lactase, are of no benefit in reducing colic and should be avoided. Parents, especially from Mexico and Eastern Europe, often use chamomile, fennel, vervain, licorice, and balm-mint teas. These teas have not been studied scientifically as remedies for colic. Families should be counseled to limit the volume of tea given because it displaces milk from the infant's diet and may limit caloric intake.

In most circumstances, **dietary changes** are not effective in reducing colic but should be considered in certain specific circumstances. There is rationale for change to a non-cow's milk formula if the infant has signs of cow's milk protein colitis. If the infant is breastfeeding, the mother can eliminate dairy products from her diet.

Prognosis

There is no evidence that infants with colic have adverse long-term outcomes in health or temperament after the neonatal period. Similarly infantile colic does not have untoward long-term effects on maternal mental health. When colic subsides, the maternal distress resolves. Rarely cases of child abuse have been associated with inconsolable infant crying.

Prevention

Much can be done to prevent colic, beginning with education of prospective parents about the normal pattern of infant crying. Prospective parents often imagine that their infant will cry only briefly for hunger. Increased contact and carrying of the infant in the weeks before the onset of colic may decrease the duration of crying episodes. Similarly other soothing strategies may be more effective if the infant has experienced them before the onset of excessive crying. Infants who have been tightly swaddled for sleep and rest during the first weeks of life often calm to swaddling during a crying episode; this is not true for infants who have not experienced swaddling before a crying episode. Parents also can be coached to learn to read their infant's cues of hunger, discomfort, boredom, or overstimulation. It is important to understand that there are times when the infant's cry is not interpretable, and caregivers can do only their best.

Chapter 12

TEMPER TANTRUMS

A temper tantrum, defined as out-of-control behavior, including screaming, stomping, hitting, head banging, falling down, and other violent displays of frustration, can include breath-holding, vomiting, and serious aggression, including biting. Tantrums are seen most often when the young child experiences frustration, anger, or simple inability to cope with a situation. Temper tantrums can be considered normal behavior in 1- to 3-year-old children, when the temper tantrum period is of short duration and the tantrums are not manipulative in nature.

ETIOLOGY

Temper tantrums are believed to be a normal human developmental stage. Child temperament may be a determinant of tantrum behavior.

EPIDEMIOLOGY

This behavior is common in children 18 months to 4 years of age. In U.S. studies, 50% to 80% of 2- to 3-year-old children have had regular tantrums, and 20% are reported to have daily tantrums. The behavior appears to peak late in the third year of life. Approximately 20% of 4-year-olds are still having regular temper tantrums, and explosive temper occurs in approximately 5% of school-age children. Tantrums occur equally in boys and girls during the preschool period.

CLINICAL MANIFESTATIONS

Temper tantrums are the most commonly reported behavioral problem in 2- and 3-year-old children. The typical frequency of tantrums is approximately one per week, with a great deal of variability (Fig. 12-1). The duration of each tantrum is 2 to 5 minutes, and duration increases with age (Fig. 12-2). Helping the family identify the typical antecedents of the child's tantrums is essential to evaluation and intervention. A child who has tantrums only when he or she misses a routine nap can be treated differently than a child who has frequent tantrums related to minor difficulties or disappointments.

The **evaluation** of a child who is having temper tantrums requires a complete history, including perinatal and developmental information. Careful attention to the child's daily routines may reveal problems associated with hunger, fatigue, inadequate physical activity, or overstimulation. A social