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REVIEW ARTICLE

Excessive crying in infants☆

Ricardo Halpern*, **Renato Coelho**

Child Development Outpatient Clinic, Hospital da Criança Santo Antônio (HCSA), Santa Casa de Porto Alegre, Porto Alegre, RS, Brazil

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KEYWORDS
Excessive crying;
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Abstract
Objective: Review the literature on excessive crying in young infants, also known as infantile colic, and its effects on family dynamics, its pathophysiology, and new treatment interventions.
Data source: The literature review was carried out in the Medline, PsycINFO, LILACS, SciELO, and Cochrane Library databases, using the terms ''excessive crying,'' and ''infantile colic,'' as well technical books and technical reports on child development, selecting the most relevant articles on the subject, with emphasis on recent literature published in the last five years.
Summary of the findings: Excessive crying is a common symptom in the first 3 months of life and leads to approximately 20% of pediatric consultations. Different prevalence rates of excessive crying have been reported, ranging from 14% to approximately 30% in infants up to 3 months of age. There is evidence linking excessive crying early in life with adaptive problems in the preschool period, as well as with early weaning, maternal anxiety and depression, attention deficit hyperactivity disorder, and other behavioral problems. Several pathophysiological mechanisms can explain these symptoms, such as circadian rhythm alterations, central nervous system immaturity, and alterations in the intestinal microbiota. Several treatment alternatives have been described, including behavioral measures, manipulation techniques, use of medication, and acupuncture, with controversial results and effectiveness.
Conclusion: Excessive crying in the early months is a prevalent symptom; the pediatrician's attention is necessary to understand and adequately manage the problem and offer support to exhausted parents. The prescription of drugs of questionable action and with potential side effects is not a recommended treatment, except in extreme situations. The effectiveness of dietary treatments and use of probiotics still require confirmation. There is incomplete evidence regarding alternative treatments such as manipulation techniques, acupuncture, and use of the herbal supplements and behavioral interventions.

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* Corresponding author.
E-mail: ricardo.halpern@gmail.com (R. Halpern).

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PALAVRAS-CHAVE
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Choro excessivo do lactente

Resumo

Objetivo: Revisar a literatura sobre choro excessivo em bebês pequenos, cólicas infantis, e suas repercussões na família e a fisiopatologia e estratégias de tratamentos.
Fonte dos dados: Revisadas as principais bases de dados, Medline, PsycINFO, LILACS e SciELO e Cochrane Library utilizando ''choro excessivo do lactente'' e ''cólicas do lactente''. Foram selecionadas as publicações mais relevantes com ênfase nos últimos cinco anos.
Síntese dos dados: É um sintoma comum nos primeiros meses de vida e é motivo de cerca de 20% das consultas pediátricas. As prevalências de choro excessivo variam de 14 a 30% nestes lactentes. Existem evidências ligando o choro excessivo nos primeiros meses de vida com problemas futuros bem como ao desmame precoce, ansiedade, depressão materna, TDAH e outros problemas comportamentais. Distintos mecanismos fisiopatológicos podem explicar esse quadro clínico, como alterações no ritmo circadiano, imaturidade do SNC, e alterações na microbiota intestinal. São descritos diversas alternativas de tratamento desde medidas comportamentais, técnicas manipulativas, uso de medicação e acupuntura com resultados e eficácia controversos.
Conclusão: Para o choro excessivo nos primeiros meses é necessário a atenção do pediatra para o entendimento, manejo do problema e oferecer suporte para pais em exaustão. A prescrição de drogas de efeitos duvidosos e potenciais efeitos colaterais não é terapêutica preconizada a não ser em situações extremas. A eficácia dos tratamentos dietéticos e o uso de probióticos ainda necessita de confirmação. Existem evidencias incompletas a respeito de tratamentos alternativos como técnicas manipulativas, acupuntura e uso de suplemento a base de ervas e intervenções comportamentais.

Introduction

Crying is a common symptom in the first 3 months of life and is responsible for approximately 20% of pediatric consultations. Although in most cases this symptom is self-limited and of benign etiology, it is a source of stress and often leads parents and caregivers to exhaustion.[1] Crying is part of the normal development of a baby and constitutes a form of communication with their caregivers, although nonspecific, and can be caused by different stimuli, such as hunger, manifestation of discomfort or pain, or simply the baby's need to approach the caregiver for emotional comfort and safety. Different prevalence rates of excessive crying have been reported in several studies, ranging from 14% to approximately 30% in infants up to 3 months of age.[1,2] A meta-analysis performed with 22 longitudinal studies showed evidence that associates excessive crying and other regulatory difficulties (sleeping and eating) in the first months of life with adaptive problems at school age, mainly related to attention deficit hyperactivity disorder (ADHD) symptoms and associated behaviors.[3,4]

In a cohort study in the city of Pelotas, infants that had excessive crying in the first three months had approximately 30% more behavioral problems than those that did not have excessive crying, even after controlling for all confounding factors.[5] Additionally, it is associated with early weaning, and maternal anxiety and depression.[6–9]

Definitions and classification

In a classic study about crying in infants, Brazelton defines excessive crying as any amount of crying that worries the parents,[10] but the consensus definition by several authors are the criteria defined by Wessel,[11] known as the ''rule of three'' (crying spells at least three hours a day, three times a week for three consecutive weeks and lasting three months). Even with a consensus, there is no single definition of what should be considered excessive crying.[12] An attempt at classification was carried out using three criteria: from newborn up to 4 months of age, infants with crying spells and irritability for three or more hours a day, three days a week and at least for one week, and no failure to thrive, i.e., without any consequences for the child's development.[13] An example would be a healthy infant, aged up to 3 months, who feeds well and has a prolonged, strident crying spell, which can last up to a few hours, writhing and bending the knees and thighs over the abdomen eliminating gases; the child seems hungry, but does not calm down after being fed. It is a crying spell without apparent cause and may be a manifestation of other medical conditions, self-limited and benign.

Although it has a benign etiology, it causes parental stress, often leading parents to exhaustion without solving the problem, which, as a result, can lead parents to take dangerous measures in an attempt to calm the infant.[14] In addition to the indiscriminate use of painkillers and sedative medications, there are several studies showing that