



Review Article

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**AMLAPITTA IN THE LIGHT OF ACHARYA KASHYAPA: AN AYURVEDIC PERSPECTIVE  
ON INFANTILE COLIC AND GASTROESOPHAGEAL REFLUX IN NEWBORNS**

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**Abstract**

**Background**

Digestive disturbances during infancy are among the most common reasons for pediatric consultation, with gastroesophageal reflux and infantile colic frequently affecting otherwise healthy newborns. Although these conditions are generally self-limiting, their multifactorial nature and incompletely understood pathogenesis continue to challenge clinicians and researchers. Classical Ayurvedic literature, particularly Kashyapa Samhita, provides a detailed account of infant nutrition, digestive physiology, and disease processes, offering valuable insights into pediatric gastrointestinal health.

**Objective**

To examine the concept of Amlapitta in the light of Acharya Kashyapa's teachings and explore its relevance in understanding gastroesophageal reflux and infantile colic in newborns through a comparative review of Ayurvedic and contemporary scientific perspectives.

**Methods**

A narrative review of classical Ayurvedic texts, with special emphasis on Kashyapa Samhita, was undertaken alongside a review of contemporary literature pertaining to neonatal digestive physiology, gastroesophageal reflux, infantile colic, maternal influences, gut

microbiota, and gut-brain interactions. Similarities and distinctions between Ayurvedic concepts and modern biomedical explanations were critically analyzed.

## **Results**

Kashyapa's descriptions of impaired digestion, physiological immaturity, breast milk-related disorders, and Dosha imbalance reveal noteworthy parallels with current understanding of neonatal gastrointestinal dysfunction. Clinical manifestations associated with Amlapitta, including regurgitation, feeding intolerance, irritability, disturbed sleep, and digestive discomfort, share similarities with symptoms commonly observed in gastroesophageal reflux and infantile colic. Furthermore, Kashyapa's emphasis on maternal diet, breast milk quality, and digestive health resonates with emerging evidence regarding maternal influences, microbiome development, and gut-brain communication during early life.

## **Conclusion**

The Ayurvedic concept of Amlapitta provides a valuable interpretative framework for understanding digestive disturbances in infancy. While gastroesophageal reflux and infantile colic cannot be considered direct Ayurvedic equivalents, the observations of Acharya Kashyapa demonstrate remarkable clinical relevance when viewed alongside contemporary pediatric knowledge. Integrating these perspectives may enrich current understanding of neonatal gastrointestinal disorders and encourage future interdisciplinary research.

**Keywords:** Amlapitta, Kashyapa Samhita, Kaumarbhritya, Gastroesophageal Reflux, Infantile Colic, Newborn, Stanya Dushti, Gut-Brain Axis, Ayurveda.

## **Introduction**

The neonatal period is characterized by rapid physiological adaptation and development, during which the gastrointestinal system undergoes significant structural and functional maturation. Adequate digestive function during this stage is essential for growth, nutrition, immune development, and overall well-being. Consequently, gastrointestinal disturbances are among the most common reasons for pediatric consultations during early infancy. Among these, gastroesophageal reflux (GER) and infantile colic are particularly prevalent and frequently contribute to feeding difficulties, excessive crying, disturbed sleep, parental anxiety, and increased healthcare utilization.

Gastroesophageal reflux is commonly observed during infancy owing to the physiological immaturity of the lower esophageal sphincter and developing gastrointestinal motility. Although often considered a benign and self-limiting condition, recurrent regurgitation and feeding-related discomfort may cause considerable concern among caregivers. Likewise, infantile colic remains one of the most challenging functional gastrointestinal disorders encountered during infancy. Characterized by prolonged episodes of excessive crying in an otherwise healthy infant, colic continues to present diagnostic and therapeutic challenges despite extensive research. Contemporary studies suggest that its pathogenesis is multifactorial and may involve altered gastrointestinal motility, visceral hypersensitivity, gut microbial imbalance, dietary influences, and neurodevelopmental factors.

Recent research has highlighted the role of the gut-brain axis in infant gastrointestinal disorders. Alterations in gut microbial composition, intestinal signaling pathways, and neurodevelopmental processes have been implicated in the pathogenesis of both reflux-related symptoms and infantile colic. These findings support the view that infant digestive disorders arise through complex and interconnected physiological mechanisms rather than isolated gastrointestinal abnormalities.

Maternal influences have also emerged as important determinants of infant gastrointestinal health. Variations in maternal diet, emotional well-being, breastfeeding practices, and breast milk composition may influence digestive function and symptom expression in infants. Increasing evidence suggests that the maternal-infant relationship plays a crucial role in shaping early gastrointestinal adaptation and development. Interestingly, many of these observations bear a striking resemblance to concepts described in classical Ayurvedic literature centuries ago.

Ayurveda recognizes infancy as a unique physiological stage requiring specialized attention and care. The branch of Kaumarbhritya provides a comprehensive understanding of childhood health, disease prevention, nutrition, and development. Among the classical authorities in this field, Acharya Kashyapa occupies a distinguished position due to his extensive contributions to pediatric medicine. Kashyapa Samhita offers detailed descriptions of breastfeeding practices, infant nutrition, developmental physiology, and childhood disorders, making it one of the most important foundational texts of Ayurvedic pediatrics.

A recurring theme throughout Kashyapa Samhita is the central role of digestion in maintaining health. The text emphasizes that infants possess a naturally delicate digestive capacity and are therefore particularly susceptible to disorders arising from impaired digestion and inappropriate feeding practices. Kashyapa further highlights the significance of breast milk quality in pediatric health through the statement “दुग्धदोषाद् बालरोगाः” (Dugdhadoṣād Bālarogāḥ), indicating that disturbances in breast milk may contribute to disease manifestation in children. This principle forms the basis of the concept of Stanya Dushti and underscores the close relationship between maternal health and infant well-being.

Within this framework, the concept of Amlapitta assumes particular significance. Traditionally, Amlapitta is understood as a disorder resulting from impaired digestion and vitiation of Pitta, leading to manifestations such as regurgitation, vomiting, feeding intolerance, irritability, digestive discomfort, and disturbances in gastrointestinal function. Although modern clinical entities such as gastroesophageal reflux and infantile colic are not explicitly described in Kashyapa Samhita, several of their clinical features demonstrate noteworthy similarities to the symptomatology associated with digestive disturbances described in Ayurvedic literature. These similarities become especially relevant when considered in the context of the infant's physiological vulnerability and the central role of digestion in pediatric health.

The growing interest in integrative and evidence-based approaches to healthcare has encouraged renewed examination of classical medical literature through contemporary scientific perspectives. Rather than attempting to establish direct equivalence between traditional disease entities and modern diagnoses, comparative exploration may reveal shared physiological themes and contribute to a broader understanding of disease mechanisms. Such an approach is particularly valuable in neonatal digestive disorders, where multifactorial pathogenesis and functional disturbances continue to challenge conventional explanatory models.

Therefore, the present review explores the concept of Amlapitta in the light of Acharya Kashyapa's teachings and examines its possible relevance to gastroesophageal reflux and infantile colic in newborns. By critically analyzing classical Ayurvedic principles alongside contemporary knowledge regarding neonatal gastrointestinal physiology, maternal

influences, microbiome development, and gut-brain interactions, an attempt has been made to develop a comprehensive perspective on digestive disturbances during infancy and to identify potential directions for future interdisciplinary research.

### **Amlapitta According to Acharya Kashyapa: A Pediatric Perspective**

Acharya Kashyapa occupies a distinctive position among the classical Ayurvedic authorities owing to his detailed exposition of pediatric physiology, infant nutrition, breastfeeding practices, and childhood diseases. Unlike many classical texts that predominantly address adult disorders, Kashyapa Samhita provides a specialized understanding of the infant as a unique physiological entity possessing specific nutritional requirements and developmental vulnerabilities. The foundation of Kashyapa's pediatric philosophy rests upon the principle that proper digestion is essential for growth, nourishment, and maintenance of health from the earliest stages of life.

The concept of Agni occupies a central place in this understanding. Kashyapa recognized that infants possess a naturally delicate and incompletely developed digestive capacity, rendering them particularly susceptible to disorders arising from improper feeding, altered breast milk quality, and impaired digestive processes. The physiological dependence of the infant upon milk as the primary source of nourishment further increases the importance of maintaining optimal digestive function. Any disturbance in the digestion, assimilation, or transformation of nutrients may adversely affect growth and health.

An equally important contribution of Kashyapa is his emphasis on the quality of breast milk and its influence on pediatric health. The classical statement “दुग्धदोषाद् बालरोगाः” (Dugdhadoṣād Bālarogāḥ) highlights the belief that numerous childhood disorders may originate from abnormalities in breast milk. According to Ayurvedic principles, maternal dietary indiscretions, incompatible food combinations, emotional disturbances, inadequate digestion, and unhealthy lifestyle practices can alter the qualities of breast milk and subsequently affect the nursing infant. This phenomenon is described under the concept of Stanya Dushti and represents one of the earliest systematic attempts to explain the relationship between maternal health and infant disease.

The significance of this concept becomes particularly apparent when considering digestive disturbances in infancy. The newborn gastrointestinal system is required to adapt rapidly to

extrauterine life while simultaneously supporting growth and development. Within the Ayurvedic framework, such physiological adaptation depends upon the proper functioning of Agni and balanced activity of the Doshas. When digestive capacity becomes impaired, food may undergo incomplete transformation, resulting in pathological changes that disturb normal physiological processes. Such disturbances may manifest through symptoms affecting feeding, digestion, sleep, comfort, and behavior.

Although Kashyapa Samhita does not describe gastroesophageal reflux or infantile colic as distinct disease entities, several observations recorded in the text provide a conceptual basis for understanding these conditions. Clinical features such as recurrent regurgitation, vomiting, feeding intolerance, irritability, abdominal discomfort, disturbed sleep, and excessive crying can be interpreted within the broader framework of impaired digestion and Dosha imbalance. These manifestations closely resemble symptoms commonly encountered in modern pediatric practice among infants presenting with reflux-related complaints and functional gastrointestinal disturbances.

The Ayurvedic concept of Amlapitta is particularly relevant in this context. Amlapitta is traditionally understood as a disorder resulting from derangement of digestive processes accompanied by aggravation of Pitta. The term itself reflects the predominance of acidic and sour characteristics arising from impaired digestion. Classical descriptions associate Amlapitta with manifestations such as nausea, vomiting, sour regurgitation, aversion to food, digestive discomfort, and disturbances in normal gastrointestinal function. Although these descriptions were originally formulated within a different medical paradigm, several of the clinical features bear a striking resemblance to symptoms observed in infants with gastroesophageal reflux.

From an Ayurvedic perspective, disease development is rarely attributed to a single pathological event. Instead, illness emerges through a progressive sequence of physiological disturbances involving Agni, Doshas, Dhatus, and Srotas. In infancy, where digestive capacity is naturally delicate, even minor disturbances may lead to disproportionate clinical manifestations. Agnimandya (impaired digestive function) may promote Pitta aggravation and contribute to symptoms resembling reflux, while simultaneous involvement of Vata may produce crying, restlessness, abdominal discomfort, and altered sleep patterns.

Consequently, digestive disturbances in infants may represent a complex interaction of multiple physiological factors rather than isolated disease processes.

The pediatric insights of Kashyapa extend beyond symptom recognition and emphasize the importance of prevention. Proper maternal diet, maintenance of healthy breast milk, appropriate feeding practices, and preservation of digestive balance are repeatedly emphasized throughout the text. Such recommendations reflect a preventive and holistic approach that remains highly relevant in contemporary pediatric care. Modern research increasingly acknowledges the importance of maternal influences, breastfeeding practices, gut microbial development, and early-life nutrition in shaping infant gastrointestinal health, thereby providing an interesting point of convergence between classical and contemporary perspectives.

Therefore, the concept of Amlapitta, when interpreted within the broader framework of Kashyapa's pediatric teachings, may be viewed as more than a specific disease entity. It represents a functional model for understanding disturbances of digestion and nutrition during infancy. While it would be inappropriate to directly equate Amlapitta with modern diagnoses such as gastroesophageal reflux or infantile colic, the similarities in symptomatology and underlying physiological themes provide a valuable basis for comparative analysis. Such an approach enables a deeper appreciation of Kashyapa's contribution to pediatric medicine and creates a foundation for examining neonatal digestive disorders through both Ayurvedic and contemporary scientific perspectives.

### **Critical Discussion:**

#### **Bridging Ayurvedic Concepts and Modern Pediatric Gastroenterology**

The increasing prevalence of functional gastrointestinal disorders during infancy has stimulated growing interest in understanding digestive disturbances through broader physiological frameworks. Despite substantial advances in pediatric gastroenterology, conditions such as gastroesophageal reflux and infantile colic continue to present diagnostic and therapeutic challenges. Their multifactorial nature suggests that no single mechanism can fully explain the diverse clinical manifestations observed during early life. This complexity creates an opportunity to examine traditional medical concepts alongside contemporary scientific knowledge in search of complementary perspectives.

One of the most striking observations emerging from this comparison is the shared recognition that digestive disturbances in infancy arise primarily from functional rather than structural abnormalities. Modern research attributes reflux and colic to a combination of transient physiological mechanisms, including altered gastrointestinal motility, visceral hypersensitivity, microbiome-related influences, neurodevelopmental factors, and feeding dynamics. Similarly, Ayurvedic descriptions emphasize disturbances in physiological balance before the appearance of overt pathology. Both approaches therefore recognize that symptoms may occur despite the absence of identifiable anatomical abnormalities.

The symptom profile of gastroesophageal reflux demonstrates noteworthy parallels with the manifestations traditionally associated with Amlapitta. Regurgitation, feeding-related distress, irritability, recurrent vomiting, and sleep disturbances frequently characterize infant reflux. From an Ayurvedic standpoint, these manifestations may be interpreted as the consequences of disturbed digestive processing accompanied by predominance of Pitta-related qualities. Although the underlying explanatory models differ, both perspectives focus on dysfunction within the upper gastrointestinal tract and acknowledge that symptom severity is influenced by multiple interacting factors rather than a single pathological event.

Infantile colic presents a more complex interpretative challenge. Contemporary literature increasingly views colic as a disorder of multifactorial origin involving gastrointestinal, neurological, microbial, and psychosocial components. This perspective is particularly interesting when examined through Ayurvedic principles, which similarly avoid reductionist explanations. Excessive crying, irritability, abdominal discomfort, and disturbed sleep can be understood as manifestations of a broader physiological imbalance involving both digestive and regulatory mechanisms. Such a multidimensional interpretation may explain why therapeutic responses often vary among infants and why no universally effective intervention has yet been identified.

The growing body of research concerning the infant gut microbiome has further transformed understanding of pediatric gastrointestinal disorders. Alterations in microbial diversity and metabolic activity have been associated with excessive crying, feeding intolerance, gastrointestinal discomfort, and disorders of gut-brain interaction. Although classical Ayurvedic texts do not describe microbial ecology in contemporary scientific terms, the concept of Ama offers an intriguing theoretical parallel. Ama represents the consequence of

impaired physiological transformation and is characterized by disruption of normal bodily functions. While Ama should not be interpreted as a direct equivalent of microbial imbalance, both concepts emphasize the importance of internal physiological disturbances in the development of disease.

Another noteworthy area of convergence concerns the relationship between maternal and infant health. Modern investigations increasingly recognize that maternal nutrition, emotional well-being, inflammatory status, and breastfeeding practices influence infant physiology and symptom expression. This understanding aligns closely with Kashyapa's emphasis on the maternal-infant relationship as a critical determinant of childhood health. Such parallels reinforce the notion that infant disorders cannot be viewed in isolation from the broader biological environment in which they develop.

The concept of the gut-brain axis has introduced a new dimension to the understanding of infant digestive disorders. Communication between the gastrointestinal tract, nervous system, immune system, and microbiota is now recognized as an important contributor to symptom generation and behavioral responses. This interconnected model resonates with the Ayurvedic view that physiological systems function as an integrated whole rather than as isolated organs. Such similarities do not imply theoretical equivalence; however, they highlight a shared appreciation for systemic interconnectedness that remains highly relevant in contemporary healthcare.

From a clinical perspective, the comparison between Ayurvedic and biomedical models highlights several common principles. Both approaches emphasize careful attention to feeding practices, maternal factors, infant comfort, and avoidance of unnecessary interventions. The importance of individualized assessment is also evident in both traditions. While modern medicine increasingly advocates personalized approaches based on biological variability and environmental influences, Ayurveda has long emphasized individualized evaluation through assessment of constitution, physiological status, and contributing factors. Nevertheless, it is essential to acknowledge the limitations of comparative interpretation. Classical Ayurvedic concepts emerged within a philosophical framework fundamentally different from that of contemporary biomedical science. Consequently, attempts to establish direct diagnostic equivalence between traditional disease entities and modern clinical conditions may oversimplify both systems of knowledge. The value of comparison lies not in

proving identity but in identifying areas where observations from different traditions converge and may contribute to a broader understanding of disease processes.

The continued relevance of Kashyapa's observations lies in their holistic approach to pediatric health. By emphasizing digestion, nutrition, maternal influences, and physiological balance, Kashyapa proposed a model that remains remarkably consistent with several themes emerging in modern pediatric research. Future interdisciplinary studies examining these relationships may provide valuable insights into neonatal gastrointestinal disorders and contribute to the development of more comprehensive and patient-centered approaches to infant healthcare.

### **Conclusion**

The pediatric teachings of Acharya Kashyapa provide a comprehensive framework for understanding digestive disturbances during infancy. His emphasis on digestion, breast milk quality, maternal influences, and physiological balance reflects a remarkably holistic approach to child health that continues to retain relevance in contemporary pediatric discourse. Although gastroesophageal reflux and infantile colic are modern clinical entities, several of their characteristic manifestations—including regurgitation, feeding intolerance, irritability, disturbed sleep, and excessive crying—demonstrate noteworthy similarities to the symptom complex associated with Amlapitta and related digestive disturbances described in Ayurvedic literature.

The comparative analysis presented in this review highlights important conceptual parallels between Kashyapa's observations and current understanding of neonatal gastrointestinal physiology, disorders of gut-brain interaction, microbiome-related influences, and the role of maternal factors in infant health. Rather than suggesting direct diagnostic equivalence, these similarities indicate that both traditional and contemporary systems of medicine recognize the central importance of digestive function in maintaining infant well-being.

By integrating classical Ayurvedic insights with modern scientific knowledge, a broader perspective emerges for understanding common neonatal gastrointestinal disorders. Future interdisciplinary research exploring these convergences may contribute to the development of more comprehensive, preventive, and patient-centered approaches to infant healthcare while further illuminating the enduring clinical relevance of Kashyapa Samhita in pediatric medicine.

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