



LETTERS TO THE EDITOR

Necrotizing enterocolitis and appendicitis in preterm infants[☆]



Enterocolite necrosante e apendicite no prematuro

Dear Editor,

I read with great interest the article entitled “There is an association between disease location and gestational age at birth in newborns submitted to surgery due to necrotizing enterocolitis”, by Feldens et al., published in the Journal of Pediatrics,¹ and we have observed surgical descriptions that corroborate those found in that study regarding the different locations of necrotizing enterocolitis (NEC).

Our letter to the editor does not intend to contradict the findings of the excellent study by the authors, but rather to raise an issue that remains unexplored and without a plausible explanation, and which we have not seen being formally addressed in studies that involve the subject. When reviewing the intestinal tract of preterm newborns with NEC during exploratory laparotomy, the classic surgical description of the findings is restricted to perforations that affect the jejunum, terminal ileum, and proximal portion of the colon to a greater or lesser extent. However, we have not found reports on the status of the ileocecal valve and particularly of the cecal appendix in cases of NEC, which would provide opportune clarification about the participation of this organ—once considered vestigial—in the disease, which could present as “acute appendicitis” at its onset.

In the Journal of Pediatrics² we described a case entitled “Appendicitis in a premature newborn”, which occurred in a newborn with a gestational age of 34 weeks, mildly asphyxiated, and who at 9 days of life developed a classic clinical picture of NEC with abdominal distension, hyperemia of the flanks and, lastly, pneumoperitoneum, leading to surgical intervention, which disclosed not a jejunal, ileal, or colonic perforation, but a cecal appendix perforation whose specimen, when assessed in the pathological anatomy division,

confirmed it to be a ruptured cecal appendix with an intense inflammatory process.

In this sense, there have been few descriptions associating appendicitis in preterm infants with NEC,^{3–5} which allows us to enquire: wouldn’t it be prudent to describe the status of the cecal appendix together with the jejunal, ileal, and colonic examination in studies involving cases of NEC? Or is NEC limited to those intestinal segments, and acute appendicitis in preterm infants is a mere finding?

Conflicts of interest

The author declares no conflicts of interest.

References

1. Feldens L, Souza JC, Fraga JC. There is an association between disease location and gestational age at birth in newborns submitted to surgery due to necrotizing enterocolitis. *J Pediatr (Rio J)*. 2018;94:320–36.
2. Barbosa AD, Júnior IF, Caetano RR, Lopes VG, Santos AM, Franco E*D. Appendicitis in the premature newborn. *J Pediatr (Rio J)*. 2000;76:466–8.
3. López-Valdés JC, Escarcega-Servín R. Appendicitis in neonatal (AN) patients with secondary necrotizing enterocolitis (ECN) due to sepsis in the uterus: a case report. *Gac Med Mex*. 2016;152:419–23.
4. Arias-Llorente RP, Flórez-Díez P, Oviedo-Gutiérrez M, Suárez-Rodríguez M, Costa-Romero M, Solís-Sánchez G, et al. Acute neonatal appendicitis: a diagnosis to consider in abdominal sepsis. *J Neonatal Perinatal Med*. 2014;7:241–6.
5. Jancelewicz T, Kimb G, Miniati D. Neonatal appendicitis: a new look at an old zebra. *J Pediatr Surg*. 2008;43:E1–5.

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