NEONATAL POSTOPERATIVE NUTRITION AFTER SURGICAL TREATMENT OF DIGESTIVE ATRESIA: A CHALLENGE TO BE FACED IN MADAGASCAR

Aurelia Rakotondrainibe*, Harifetra MR Randriamizao* and Nicole RC Rakotoarison*
*University of Antananarivo, Madagascar

Statement of the problem: Surgical procedures of neonatal digestive malformations are often performed in poor nutritional status, which can alter the quality of the postoperative healing. An optimal nutritional support is necessary to ensure a favorable outcome after neonatal digestive surgery. In Madagascar, the perioperative nutritional support adapted to the infants is failing. The purpose of this study was to analyze the nutritional management of newborns operated for their digestive system abnormalities.

Methodology: We carried out a 24-month retrospective study (January 2015 to December 2016) of Malagasy infants, operated for digestive atresia admitted in surgical intensive care unit. The demographic criteria, the type if the digestive atresia, the characteristics of the nutritional support, as well as the outcome of the patient were analyzed. Results are expressed as median [extremes]. The Spearman correlation test was used (XLSTAT*).

Findings: Of the 40 newborns admitted in surgical intensive care unit, during the study period, 16 were retained for the study (4 [1-11] days old, 6 girls / 10 boys, 2210 [1400-3030] g). The most observed and operated digestive malformations were esophageal and duodenal atresia (10 cases). Intervention time was 1 [0-16] days. A parenteral admixture of amino-acids (Celemin® manufactured by CLARIS LIFESCIENCES Ltd) was given in eight patients. Administration time of postoperative enteral breast milk was 3 [1-5] days for 11 newborns. This was correlated with the site of atresia (p=0.006). Nine of them died; the length of stay was 7 [2-38] days.

Conclusion & Significance: The neonatal postoperative nutrition in Madagascar is still precarious. To introduce early enteral nutrition is the current recommendations. Inputs adapted to the newborn should be available. However, the latter being expensive, the alternative in a low-income country like Madagascar would be the enteral administration of breast milk, as soon as conditions permit it, with close clinical and biological monitoring.

Keywords: Breast milk, Enteral nutrition, Esophageal atresia, Intestinal atresia, Newborn.

Biography
Aurelia Rakotondrainibe is an anesthetist and intensivist working in Antananarivo-Madagascar. After studying in Faculty of Medicine of Antananarivo, Bordeaux and Paris, her work is essentially focused on anesthesia and intensive care of digestive pathologies and postoperative recovery.
aurelia.rakotondrainibe@gmail.com