

# ENTERAL NUTRITION BY GASTROSTOMY IN PEDIATRIC PATIENTS:

# Experience in a Hospital of Colombia





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# Objective:

To characterize the group of patients with gastrostomy and evaluate their nutritional response.

# Patients and method:

A descriptive and retrospective study was made in 84 patients in order to analyze their clinical record in the Pediatric Nutrition, Hepatology & Gastroenterology Department at Clinica del Niño PREVIANDES; Bogotá, Colombia, between August 1996 and May 2007.

# Results:

Male gender predominated (54%), 30% were infant, 29% toddler and 19% adolescent (Table  $N^{\circ}$  1).

Table No. I. Indications for gastrostomy.

DISEASE	n	%
Neurological impairment	64	77
Upper tract digestive obstructive (esophageal atresia, esophageal strictures by caustic ingestion)	15	17
Cystic fibrosis	4	5

#### Tubes for the gastrostomy

The diameter used more frequently was 18 french (26.9%) and the least used was 10 french (1%). Our patients used differents types of gastrostomy tubes (Figure  $N^{\circ}1$ ).

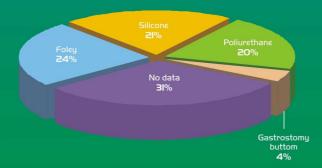


Figure No. I. Types of tubes used for the gastrostomy.

# Complications

The complications were more frequent in children under 6 months old and in the post-operative period ( $\chi^2$ = 8.36 p<0.05; RR = 2.4 (Cl95% 1.6 – 4.2). The greatest number of complications (34%) occurred with Foley tubes. Among them: infection, fistulas, dilatation of the gastrostomy orifice, exit and obstruction of the tube (Figure N°2).

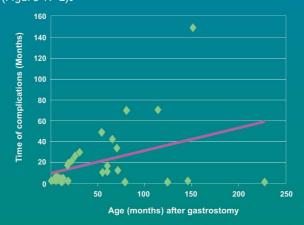


Figure No. 2. Time of complications depending on the age where complicated (months).

#### **Nutritional Status**

The patients's nutritional status (n=74) according to W/A (Z score – NCHS) improved with respect to initial (Figure  $N^{\circ}3$ ).

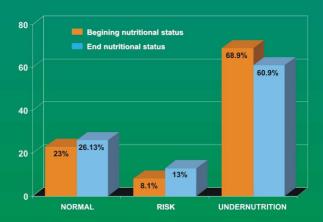


Figure No. 3. Change of nutritional status (at the beginning of gastrostomy and 38 months after)

# Conclusion:

Gastrostomy is the enteral nutrition method ideal for children with cerebral palsy that have feeding difficulties or for children with pathology requiring greater ingest and not are capable to achieve it through the mouth. It is important to implement vigilance and control measures, supervised by a multidisciplinary team to prevent the appearance of complications. It is important to avoid the Foley tubes in gastrostomy, since they proved to be responsible for the majority of the complications in our Hospital, both infectious and mechanical in the place of gastrostomy.