

# PARENTERAL NUTRITION IN A NEONATOLOGY INTENSIVE CARE UNIT: DURATION AND COMPLICATIONS

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## BACKGROUND AND IMPORTANCE


Parenteral nutrition (PN) can be used in any malnourished child or on risk of malnutrition. In preterm newborns, it should be started in the first hours of life, although this artificial technique is not exempt from a series of complications related to its use.

## AIM AND OBJECTIVES

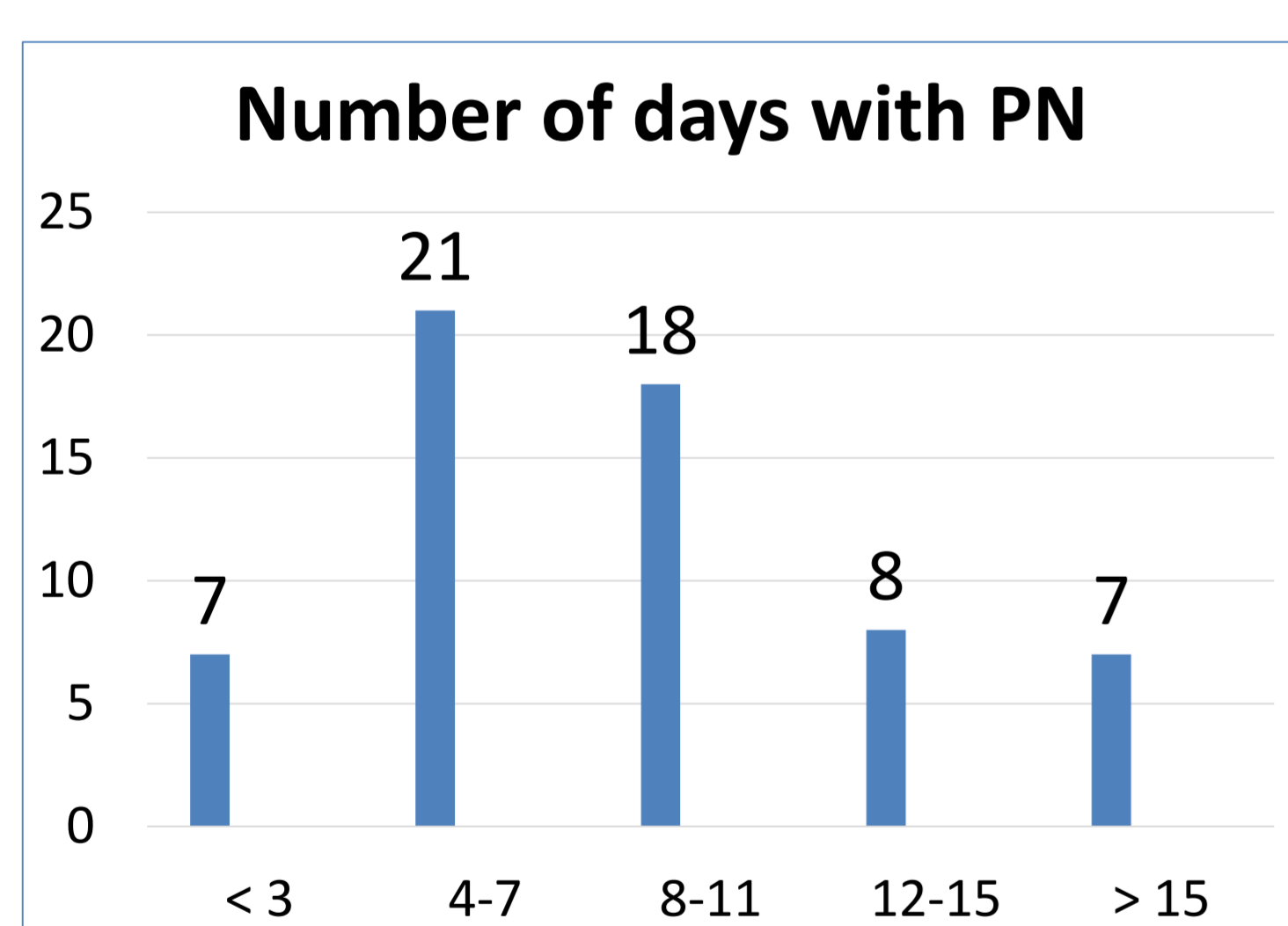
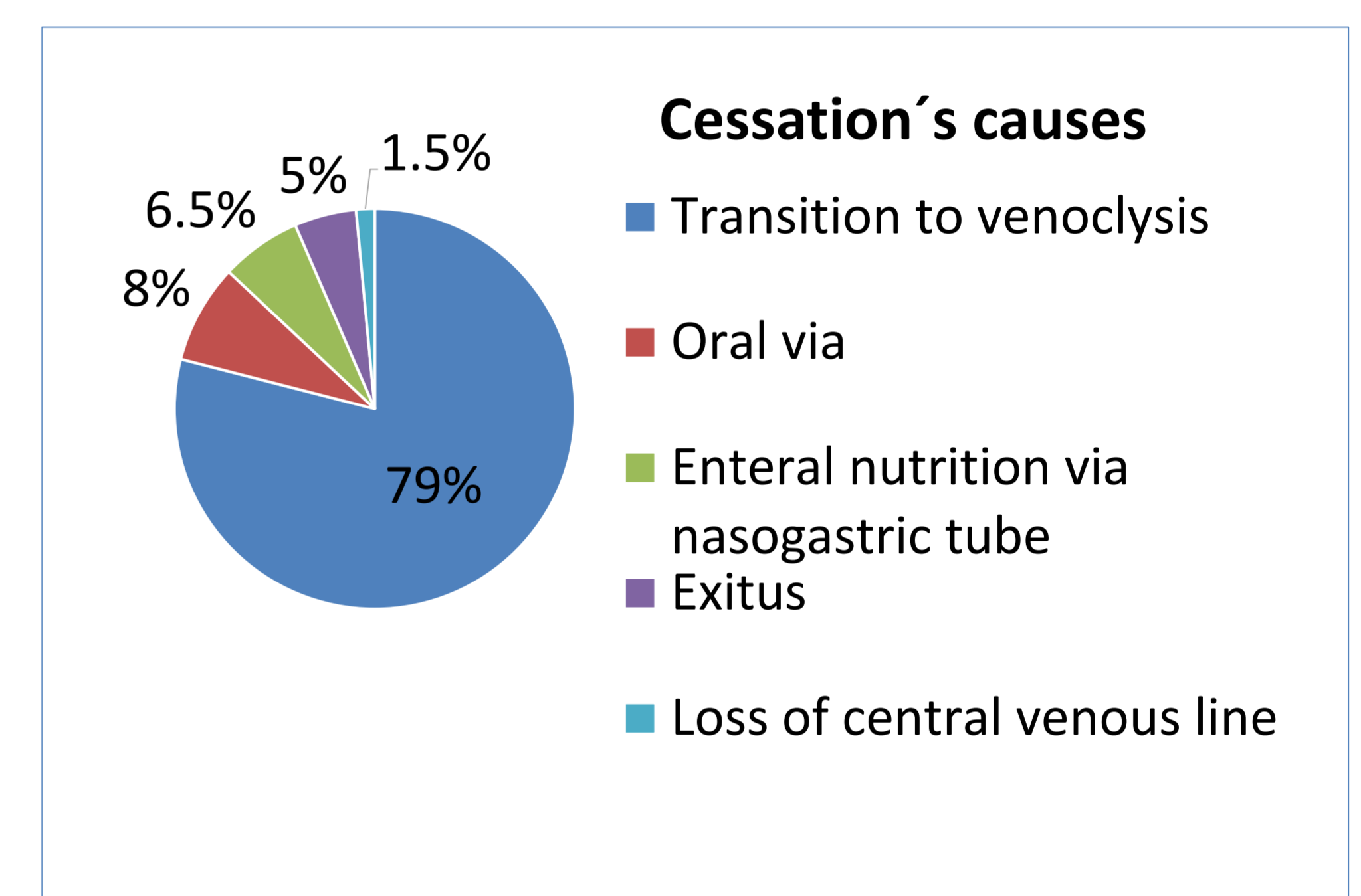
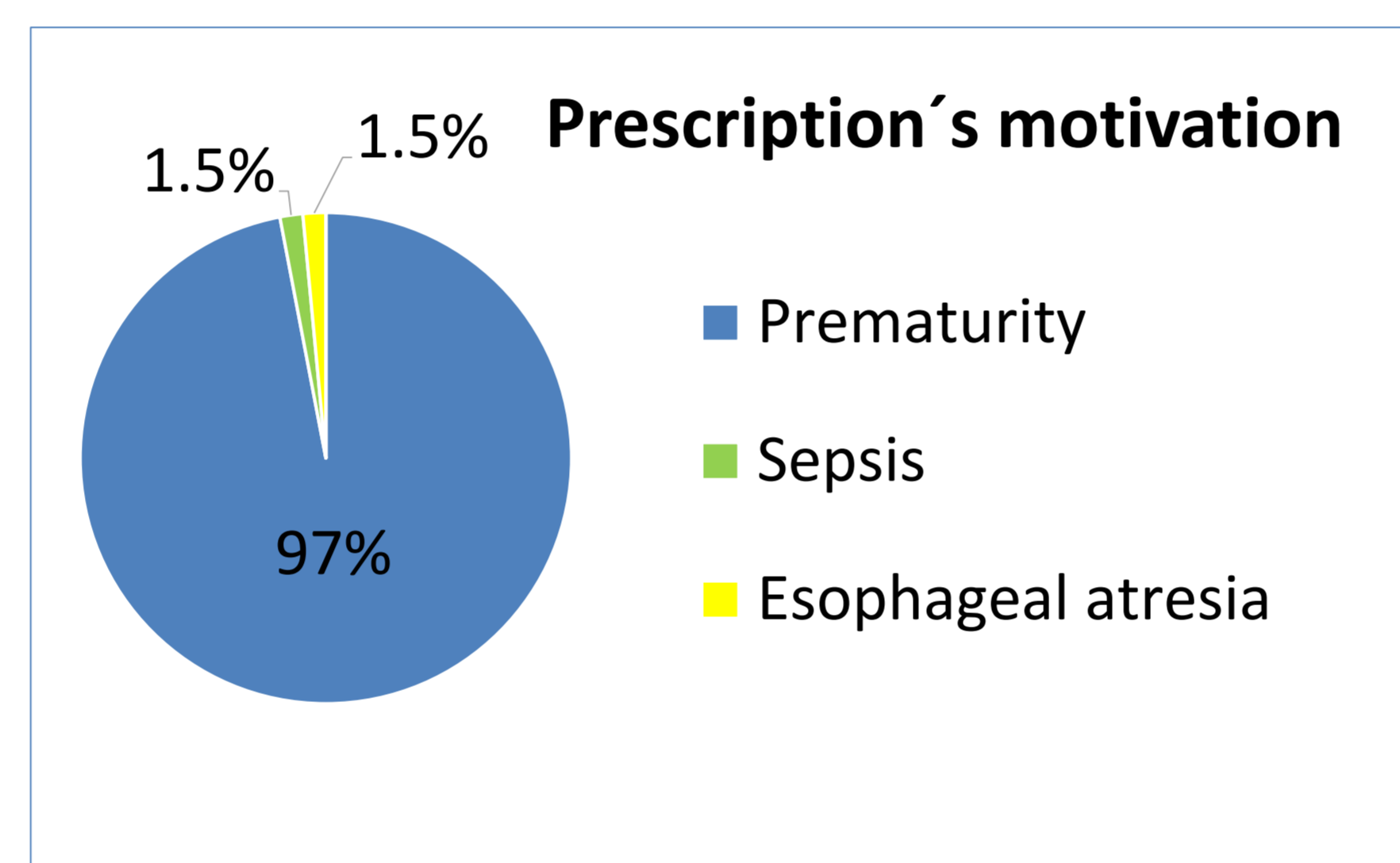
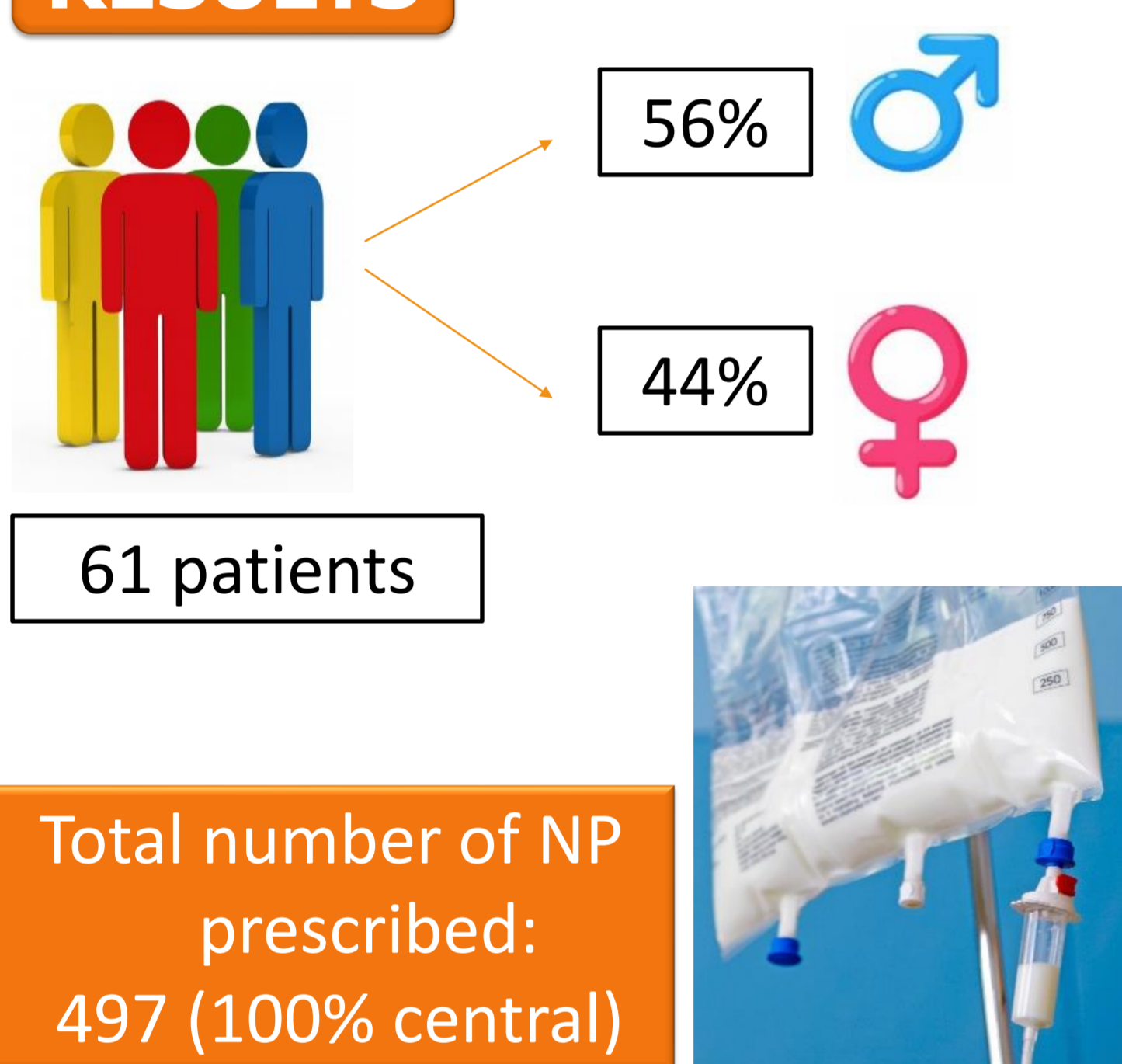
To analyze the use, prescription time and incidence of complications of PN in a Neonatology Intensive Care Unit (ICU).

## MATERIALS AND METHODS

During the year 2018 a retrospective and descriptive study on the use of PN in the Neonatology ICU in our Hospital was performed.

<i>Electronic medical record and NP software</i> 	Demographic data	Type of nutrition
	Birth weight	Number of prescription days
	Prescription/suspension's motivation	Metabolic complications (MC) (out of range glucose and triglyceride levels)
	Total number of PNs elaborated	Electrolytic complications (EC) (out of range ions)

## RESULTS



**Mean duration in preterm infants by weigh**

Weight	n	Mean duration (days)
≤ 1.5kg	31	9.5
> 1.5 kg	28	8

Out-of-range analytical determinations were observed in 116 cases

**Average of altered parameters in premature according to weigh**

Weight	Average
≤ 1.5kg	2
> 1.5 kg	0.9

**Average of alterations according to duration**

Duration	Average
≤ 5 days	0.5
5-10 days	1.5
> 10 days	3



65.5% only developed EC → Most frequent: hipernatremia (31%)

36% only developed MC → Most frequent: hyperglycaemia (24.5%), being also the earliest

## CONCLUSION AND RELEVANCE

- ✓ The main reason for the prescription of PN in neonates was prematurity; and for the cessation, the switch to venoclysis.
- ✓ Usage time was slightly longer in those with lower birth weight, as well as the developed alterations, the most frequent being hypernatremia, and the earliest hyperglycemia.



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