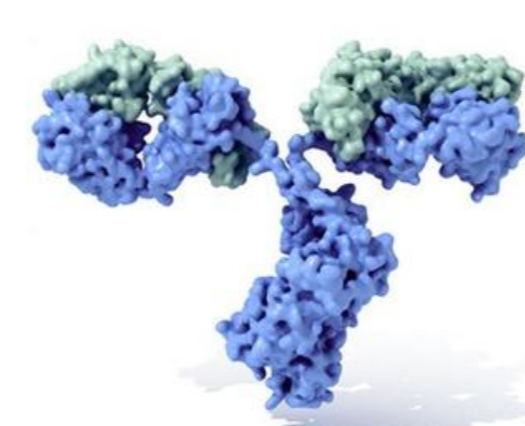


EVALUATION OF THE REAL INFUSION TIME OF INTRAVENOUS IMMUNOGLOBULIN AND INFLUENTIAL FACTORS IN ROUTINE CLINICAL PRACTICE ANALYSIS

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Background

Intravenous immunoglobulin (IVIG) is the standard of care for humoral immunodeficiencies (HID) and several systemic autoimmune diseases. Its **chronic administration** represents an important **economic and logistical impact**.



Purpose

To assess the **real time of infusion of IVIG** compared to the established maximums and to analyse **which factors could affect it**, in order to find out if the infusion rate could be higher.

Material and Methods

OBSERVATIONAL, AMBISPECTIVE STUDY

- ✓ **Population:** patients chronically receiving IVIG, day tertiary hospital
- ✓ **Study period:** December 2016 – March 2017
- ✓ **Variables registred** (from medical records and nursing software)
 - ◆ **Biodemographic data:** sex, age, weight
 - ◆ **Clinical data:** primary diagnosis, dose, frequency of administration
 - ◆ **Infusion and premedication times**

✓ Primary endpoint

Infusion time expressed as mean and standard deviation (SD) for each commercial preparation.

✓ Also analyzed

Influence of demographic covariates, IVIg dose, commercial preparation and the need and type of premedication (ANOVA-test performed with Stata®)

Results

Population		Diagnosis	
Number of patients	175	Humoral immunodeficiencies	69 (39.4%)
Mean age (years)	55 (20-91)	Neurological disease	89 (50.9%)
Men	49 %	Systemic autoimmune disease	17 (9.7%)

The dose administered, need of premedication and commercial preparation **had an impact on the time of infusion**; however, it was not affected by sex, weight or age.

All preparations were infused at a **lower rate** ($p < 0.05$) than the maximum set in the technical sheet.

Premedication was necessary in 72 patients (**41%**) being oral acetaminophen the most commonly used. However, premedication combinations were also effective (31 patients, 18%) being acetaminophen + dexchlorpheniramine (11 patients) the most used.

Comercial preparation	Mean and SD of infusion rates	Total of patients
Intratec®	9.14 g/h SD 0.98 g/h	n=3
Octagamocta®	8.48 g/h SD 1.81g/h	n=25
Privigen®	8.39 g/h SD 2.30g/h	n=84
Flebogamma-Plangamma5%®	7.33 g/h SD 1.76 g/h	n=36
Flebogamma10%®	7.61 g/h SD 1.54 g/h	n=16
Kiovig®	7.30 g/h SD 2.60g/h	n=6
Gammagard®	6.44 g/h SD 2.08 g/h	n=5

Conclusion

1

Administration of IVIG is performed at an **infusion rate that is below** the established **maximums**.

2

Many patients **need premedication** to **avoid infusion reactions**

3

Increasing the rate of IVIG administration **should be considered** for those patients with **good tolerance**, **saving time and money** invested in day hospital.