

# HOME EDUCATION FOR PATIENT'S AUTONOMY

F. Sánchez<sup>1,2</sup>, C. Rodríguez<sup>1</sup>, A. Brasé<sup>1</sup>, R.A. Sabaté<sup>1</sup>, A. Hermida<sup>1</sup>, E. Hernández<sup>1</sup>, M. Bastida<sup>1</sup>, and X. Nogués<sup>1</sup> In representation of Hospital at Home Unit<sup>1</sup>

Internal Medicine<sup>1</sup> and Infectious Diseases<sup>2</sup>. Hospital del Mar. Barcelona. Spain.

## Introduction

Hospitalization at Home (HAH) is a unique opportunity to carry out individualized and patient-based health education. For this reason, HAH may have among its objectives to develop the self-care of chronically ill patients to promote their autonomy and improve their quality of life.



### Parenteral Nutrition (PN) background:

Until the early 60s, PN was restricted to the administration of high concentrations of dextrose and electrolytes.

In 1962, Wrendling and colleagues developed lipid infusions as the principal source of calories for parenteral feeding.

In 1966, Dudrick and Rhoads developed PN for patients who had lost their small bowel.

In 1976, Solassol and Joyeux developed the "three-in-one" mixture by putting sugars, lipids and aminoacids in a single bag.

In 1978, Shils and colleagues and Jeejeebhoy and colleagues developed "home PN" to reduce costs.



## Objective

The golden rule of nutrition: "the gut should always be the preferred route for nutrient administration". Therefore, PN is indicated when there is severe gastrointestinal dysfunction. With this work we present the program that our HAH Unit carries out to educate patients in the self-administration of total parenteral nutrition (TPN), when this treatment is prescribed for life.

## Methods

- The educational tools were:

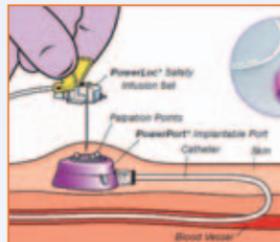
Multidisciplinary meetings with patients and relatives to approach emotional and clinical aspects derived from the prospect of carrying TPN at home.

Personalized training, with video and fact-sheet assisted instructions to familiarize the patient with the connection-disconnection of the nutrition bag.



- Nursing implications:

- TPN intravenous line needs a filter
- Dedicated line for infusion
- IV tubing change (gripper)
- Requires IV pump administration
- Formulas prepared by pharmacist, double checked by nurse
- Special physician's order sheet
- 10% Dextrose (Glucose) solution as a substitute when TPN not available
- Introduction of TPNs were gradual TPN solutions were delivered as a continuous perfusions
- Check electrolytes every other day, liver function tests and renal parameters biweekly; and triglicerydes weekly.



- Patient's Reminder:

- Strict asepsis
- 24h TPN prepared at a time
- Change infusion sets daily
- Separate iv access for administration of other drugs.



## Results

During the study period (2010-2018) there were 10 TPN prescriptions in 9 patients, with mean age (range) 56 years (42-76). There were 2 men and 7 women, all of them with short bowel syndrome (SBS). In the first interview, 60% of the patients did not know the implications of SBS; moreover, none of them had managed a nutrition pump before. At discharge from HAH, all patients were able to describe the major signs and symptoms of their condition, identify the reasons for consultation and handle their TPNs in safe, sterile conditions. The median of days to perform adequately the technique was 21. No catheter-related complications (infection, thrombosis) were detected, and no patient needed readmission.

## Conclusions

Through HAH, lifetime conditions such SBS described above are an opportunity to educate patients in improving their autonomy and gaining confidence in their own health care, becoming less dependent of conventional hospitalization.

