The resulting device is a manual pump for infusion of EN to patients that solves previously identified problems and is highly functional and compact" Romano-García and Fernández-Morera (2017).

Abstract:

INTRODUCTION: Enteral nutrition (EN) is based on administration of liquid solutions into the gastrointestinal tract using a tube. After identifying unsolved practical difficulties in administration of EN using volume syringes, a new device to overcome such technical difficulties was proposed.

MATERIAL AND METHODS: Specific technologies (CAD, 3D printing) were used in collaboration with the PRODINTEC Foundation (Gijón, Asturias). Clarke Modet, a law firm specialized in intellectual property, provided legal advice on formulas for legal protection of the invention.

RESULTS AND DISCUSSION: The resulting device is a manual pump for infusion of EN to patients that solves previously identified problems and is highly functional and compact. It would allow for comfortable and safe administration of solutions. Integration of a bottle into the device itself and pump dimensions facilitate transport and patient mobility. According to the described configuration, this invention has many advantages over the previously known procedures, such as a simpler administration within the field of intermittent EN, improving the standard nutritional support technique, which in this case is use of volume syringes. This would facilitate the work of caregivers while promoting patient self-care and autonomy. The pump was accredited novelty of design, inventive activity and industrial exploitation potential by the European Patent Office (EPO), to which a patent has been requested.

Reference:

Romano-García, J. and Fernández-Morera, J.L. (2017) Design and development of a manual

pump for bolus enteral nutrition. Endocrinología, Diabetes y Nutrición. December 2nd. . .

doi: 10.1016/j.endinu.2017.09.009.

Thank you to our partners for supporting IVTEAM