



Universidad de Oviedo



Fundación para la Investigación y la Innovación
Biosanitaria del Principado de Asturias

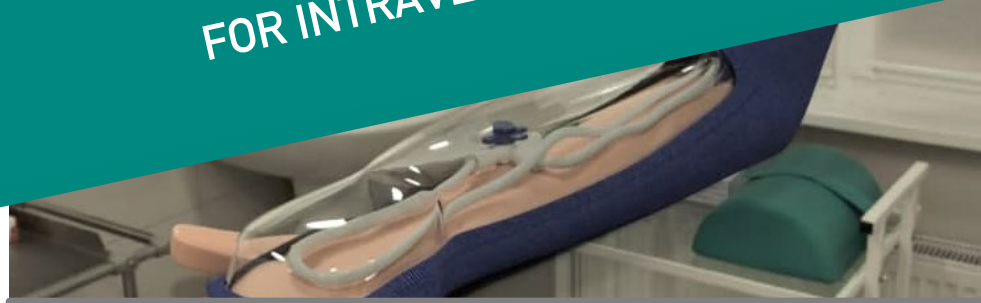


GOBIERNO DEL PRINCIPADO DE ASTURIAS
CONSEJERÍA DE CIENCIA,
INNOVACIÓN Y UNIVERSIDAD



PROTECTIVE DEVICE FOR INTRAVENOUS ACCESS

TECHNOLOGY OFFER



ABSTRACT

Most of hospitalized patients receive intravenous therapy. Many of them, especially the elderly, present episodes of disorientation and / or agitation in which they tend to grab and tear off venous lines, since they perceive it as a foreign element and a threat.

This situation represents serious problems for the patients, since they can harm themselves or it is necessary to channel another venous line. The latter may be less harmful but implies a new puncture resulting in pain. When it is not possible to avoid the patient's pulling, a common solution is to resort to restraints on the patients' hands. This circumstance dehumanizes health care and has a high emotional impact for patients, families and nurses. For nursing, this whole situation leads to an increase in the workload, a greater difficulty in finding intravenous lines as venous access runs out, and an important ethical dilemma between the healthcare that the patient requires and their right to autonomy.

Our technology is an easy-to-use device for nursing professionals that protects the patient from self-harm or accidents, and facilitates access and manipulation of venous lines, stopcocks, manifolds, syringes and any other equipment for administration of fluid therapy. Its design takes into account the comfort and ergonomics to avoid injuries caused by prolonged use, with special attention to the materials used that guarantee safety at all times.

INNOVATIVE ASPECTS

- ✓ It is useful to avoid the current problems that arise when some patients, especially those of advanced age or those who present episodes of disorientation or agitation, tear off venous lines.
- ✓ It is easy to use for nursing professionals, it facilitates access to the venous route and the use of usual equipment such as manifolds, syringes, and other common equipment for administration of fluid therapy.
- ✓ It takes into account aspects related to ergonomics and safety to avoid injuries to the patient.
- ✓ The materials used are reusable and easy to disinfect and sterilize, which makes this device reusable and aligned with circular economy requirements.

COMPETITIVE ADVANTAGES

- ✓ Efficacy, as the device is useful to avoid the current problems that arise when some patients tear off venous lines.
- ✓ Ergonomic, comfortable and safe.
- ✓ Environmentally friendly, since the materials used are reusable and easy to disinfect and sterilize.
- ✓ Efficiency, as it increases the quality of care provided and reduces the workload of the nursing staff.

PATENTS

ES utility model granted [[Expenses subsidised by the Government of the Principality of Asturias, through FICYT, for the knowledge and technology transfer 2020. AYUD/2021/57273](#)]

TYPE OF COLLABORATION

Licence agreement and / or joint further development agreement

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