Simulator of continuous venovenous renal depuration treatment for care training of health professionals

Summary
The invention falls within the devices for simulation in education and training of health professionals. In particular, it is focused in the care training of critically ill patients requiring extrarenal continuous venovenous hemofiltration treatments.

It can be used as a teaching tool in practical training of health personnel, such as medical or nursing staff. This training can be performed both in isolation, or integrated into Advanced Simulation systems (high fidelity) of patients.

State of development
There is a prototype of the device that is currently being used for training of medical and nursing staff in the “Complexo Hospitalario Universitario de Santiago de Compostela”

Innovative aspects and applications
- Simulation of continuous venovenous renal depuration treatment of critical patients
- Training of health professionals
- Real-time operation
- Improvement of patient safety

The invention
The device allows carrying out modification of the patient’s clinical condition and generating simulated in real time and in coordination with relevant clinical changes typical operating problems in clinical practice, without the professional realizing that the instructor is generating these events. Thus, the system can respond realistically and consistently to procedures performed by the student in real time. In this way professionals are trained with a more accurate simulation of clinical scenarios and improve their learning. The device simulator is a remote controller of the pressures generated in a number of points in the circuit system that allows to realistically reproduce continuous venovenous hemofiltration and real-time clinical conditions occurring or may occur in real patients subjected to this treatment. The controller, when incorporated into advanced patient simulator, can realistically reproduce these conditions in settings that can be used for effective training of health personnel.

IP rights
- Spanish patent application

Type of collaboration
- License agreement
- Joint further development

More information: [http://www.ibridgenetwork.org/usc/hemofiltering_simulator](http://www.ibridgenetwork.org/usc/hemofiltering_simulator)
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Scientific References

Publication list

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