

Introduction

Good manufacturing practices encourage to consider **risk of chemical contamination** of actors involved in the cytotoxic circuit.

At the Dieppe Hospital Center, pharmacy provides elastomeric portable infusion pump of Fluorouracil (5FU) for **home administration**. Liberal nurses are involved in their final manipulation and elimination. We observed a significant number of non-compliance with **cytotoxic waste disposal rules**, linked to the lack of knowledge of chemical risk.

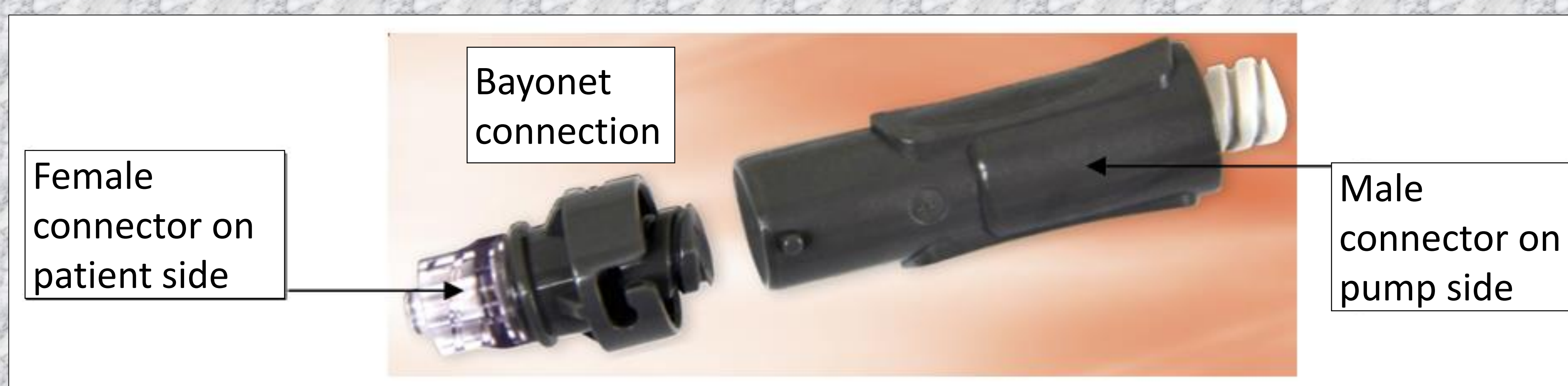
The recent commercialization of the secure, anti-flow device Qimono® of Vygon® could enhance the **safety of disposal** of elastomeric pump. Our objective is to evaluate this device.

Materials and methods

This Qimono® device **prevents any flow in the environment** when connecting / disconnecting and transporting the elastomeric pump.

We have trained **hospital staff** (pharmacy technician and nurses) to its use and sent an information letter to **the city nurses**. After 4 months of trials, we carried out the evaluation of Qimono® by survey.

We sent the nurses a **paper questionnaire** and an online questionnaire (32 nurses). The preparers responded to a specific **online questionnaire** (4 preparers). Criteria for judgment included **ease of use, preparation time, and safety gain**.



Results

During this test period, we equipped 190 elastomeric pump, for 43 patients, which involved 28 liberal nurses and 4 oncology nurses. The response rate of the preparers was 100%, 32% for the nurses.

DRAWBAKS

Not Intuitive, requires training in use

Preparation : complex device consisting of 3 parts, with securing of the closure -> development of a handling technique

Administration : to understand the system of connection / disconnection

Waste of time

Linked to the additional steps during preparation (device connection, relatively long device purge time)

Can be optimized with good handling technique

Considered by the preparers as acceptable to the benefit of nurses.

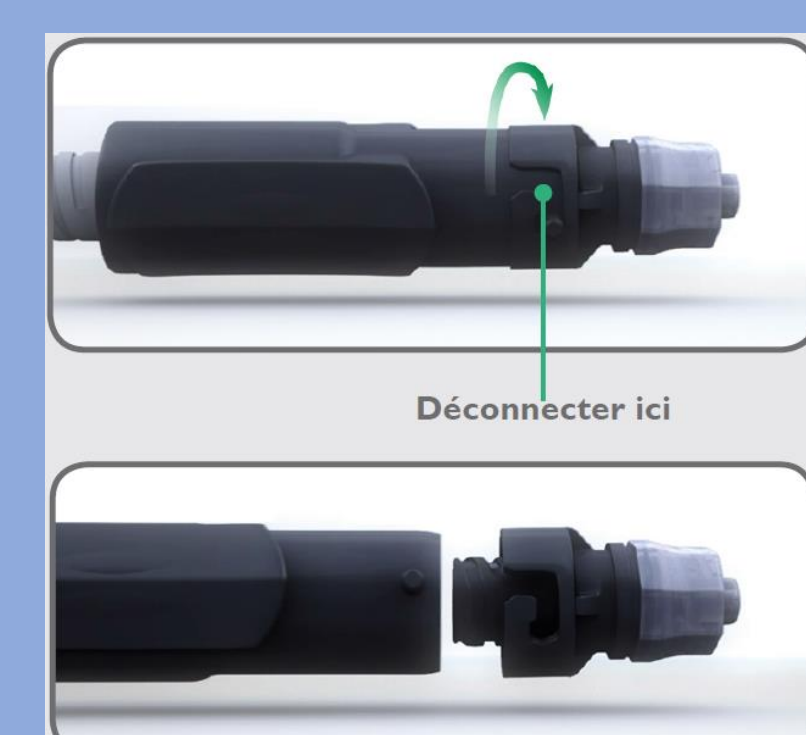


ADVANTAGES

Easy to use

Once the technique has been mastered, the bayonet system allows easy and fast manipulation of the

elastomeric pump, facilitating the connection / disconnection of the infusion equipment



Secure

City nurses are aware of their responsibility in the management of waste (decree of April 12, 2016) and the risk of chemical contamination. Once the male QIMO connected, the disconnection can only be done on the bayonet side, so there is no risk of misuse. This closed system makes it possible to avoid any discharge and facilitates their handling of the waste.

Conclusion

Considering the satisfactory results in safety, we decided to maintain the use of this device for 5FU elastomeric pump for home administration through service providers. In the future, this device could be of interest for any infusion of hazardous drugs, but its cost represents for the moment a limit in our establishment.