# INTRODUCTION OF A NEW TRANSPARENT DRESSING ADAPTED TO SAFETY HUBER NEEDLES: EXPERIENCE AND METHODOLOGY OF THE RENE GODUCHEAU CANCER CENTRE (NANTES)

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## BACKGROUND

The introduction of safety Huber needles (POLYPERF® Safe – PEROUSE MEDICAL), larger than the standard needles, in our centre (performing 27,000 courses of chemotherapy and inserting 1,500 totally implantable ports [TIP] per year) revealed that available dressings were not compatible with their optimal use and stability. In particular, diplacement of the needle may occurs during removal of the dressing.

In cooperation with PEROUSE MEDICAL, we therefore drew up specifications for the development of a new innovative, sterile dressing, adapted to safety Huber needles, and designed a methodology for its evaluation.

## DEVELOPMENT OF THE NEW DRESSING

### 1. Specifications

- Large surface area with a central reinforced non-adhesive zone
- Hypoallergenic
- Transparent (→ monitoring of the injection site)
- Good adhesion (→ decreased frequency of renewal)
- Permeable to perspiration (→ optimal adhesion)
- Waterproof (→ allowing the patient to shower)
- Impermeable to bacteria and viruses

**New sterile dressing POLYFILM® (Fig. 1), easy to apply (Fig. 2) and to remove**

Figure 1. The POLYFILM® dressing, with two adhesive strips to keep the Huber needle in place

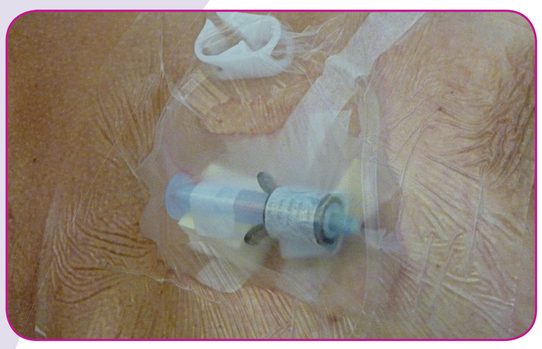
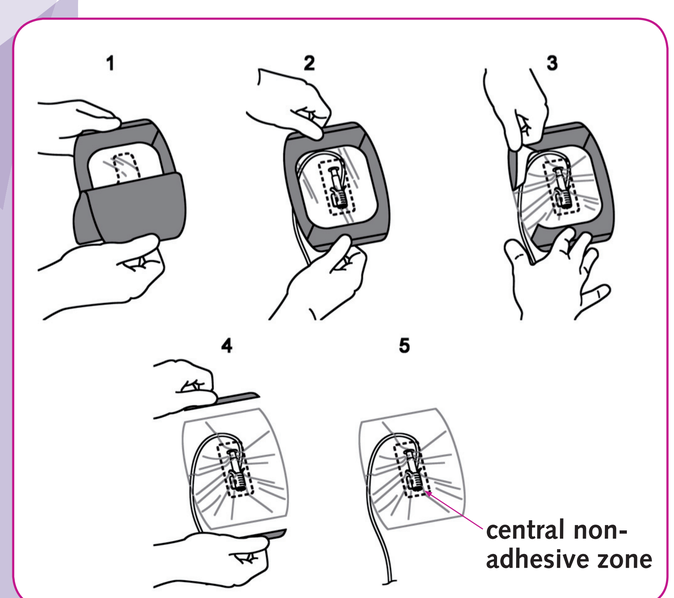


Figure 2. Application of the POLYFILM® dressing




### 2. Methodology

- Creation of a task force (departments concerned, hygienists, pharmacy)
  - Definition of the study duration
  - Definition of the number of samples to be tested
- Design of an evaluation form
- Presentation of the new dressing to the nurses concerned
- Start of the first phase of evaluation, monitored by the task force
- Synthesis of the results and identification of further improvements needed
- Optimisation of the dressing by PEROUSE MEDICAL
- Implementation of the second phase of evaluation

## RESULTS

### First phase of evaluation (3 weeks)

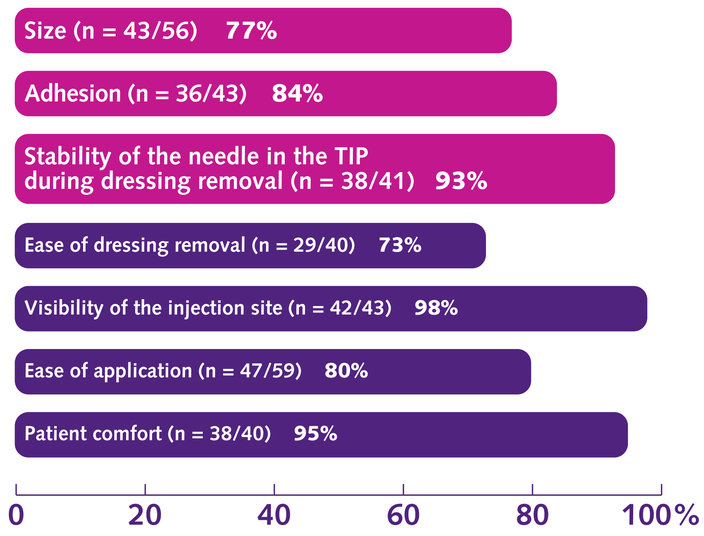
- 59 evaluation forms collected
  - 22 (37%) from the outpatient unit
  - 37 (63%) from inpatient departments
- Conclusion: necessity to optimise the dressing
  - Increase in the size and number of the strips maintaining stability of the Huber needle, to achieve better adhesion (replacement of two 7.5 cm strips by three 10 cm strips)

### Principal characteristics of the final POLYFILM® dressing

- Size (12 x 14 cm)
  - Adapted to safety Huber needles
- Central zone
  - Non-adhesive (to avoid needle displacement on removal of the dressing)
  - Transparent (to allow monitoring of the injection site)
  - Reinforced (to avoid tears)
- Three 10 cm adhesive strips
  - To assure stability of the safety Huber needle (and attached tubing)
  - To record the date of application of the dressing
- Frequency of renewal
  - 4 to 5 days

### Second phase of evaluation - Results

Figure 3. Level of satisfaction with the POLYFILM® dressing (percentage of responses "good" or "very good")




- **POLYFILM®** meets a need:
  - **66%** of affirmative responses (**100%** in the inpatient departments, in which needle withdrawal is practised, in contrast to the outpatient unit)

**IN TOTAL:**

- **Appropriate size and adhesion**
- **Easy removal with no risk of needle displacement in the TIP**

## CONCLUSION

**Close cooperation between the pharmacy of the René Gauducheau cancer centre, the hospital departments concerned and PEROUSE MEDICAL, and design of an evaluation methodology respecting Good Clinical Practices, permitted development of a new, innovative dressing, POLYFILM®:**

- **Specifically designed for use with safety Huber needles**
- **Validated by nurses and patients in the outpatient unit and inpatient departments of the René Gauducheau cancer centre (Nantes)**
- **Responding to a previously unmet need**
  - Adequate size and adhesion
  - Possibility of removal without risk of needle displacement in the TIP

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Teaching
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