

“HIGH-ALERT DRUGS... REORGANIZING THE EUROPEAN INSTITUTE OF ONCOLOGY”

Poster n. GRP058

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Objectives

The Joint Commission International (JCI) Standards prescribe hospitals to develop a method to improve high risk drugs safety. The European Institute of Oncology (IEO) decided to develop this method improving the safety of high-alert drug management in order to reduce the occurrence of medication errors, with an impact on the quality of service provided and patient quality of life.

Methods

The work was structured as follows:

1. Distribution, collection and analysis of a test regarding high-risk drugs and LASA (look-alike/sound-alike) perception of EIO nurses.
2. Visits to 8 units, representative of the care areas, with direct observation of drug preparation/administration, according medical prescription.
3. Observation of primary and secondary packaging of 731 drugs in the IEO formulary. A list which shows all the possible confusable drugs (LASA) has been prepared.

Discussion

From tests and visits to the 8 hospital units, we observed that in our hospital there were some issues regarding the correct management of high-risk drugs.

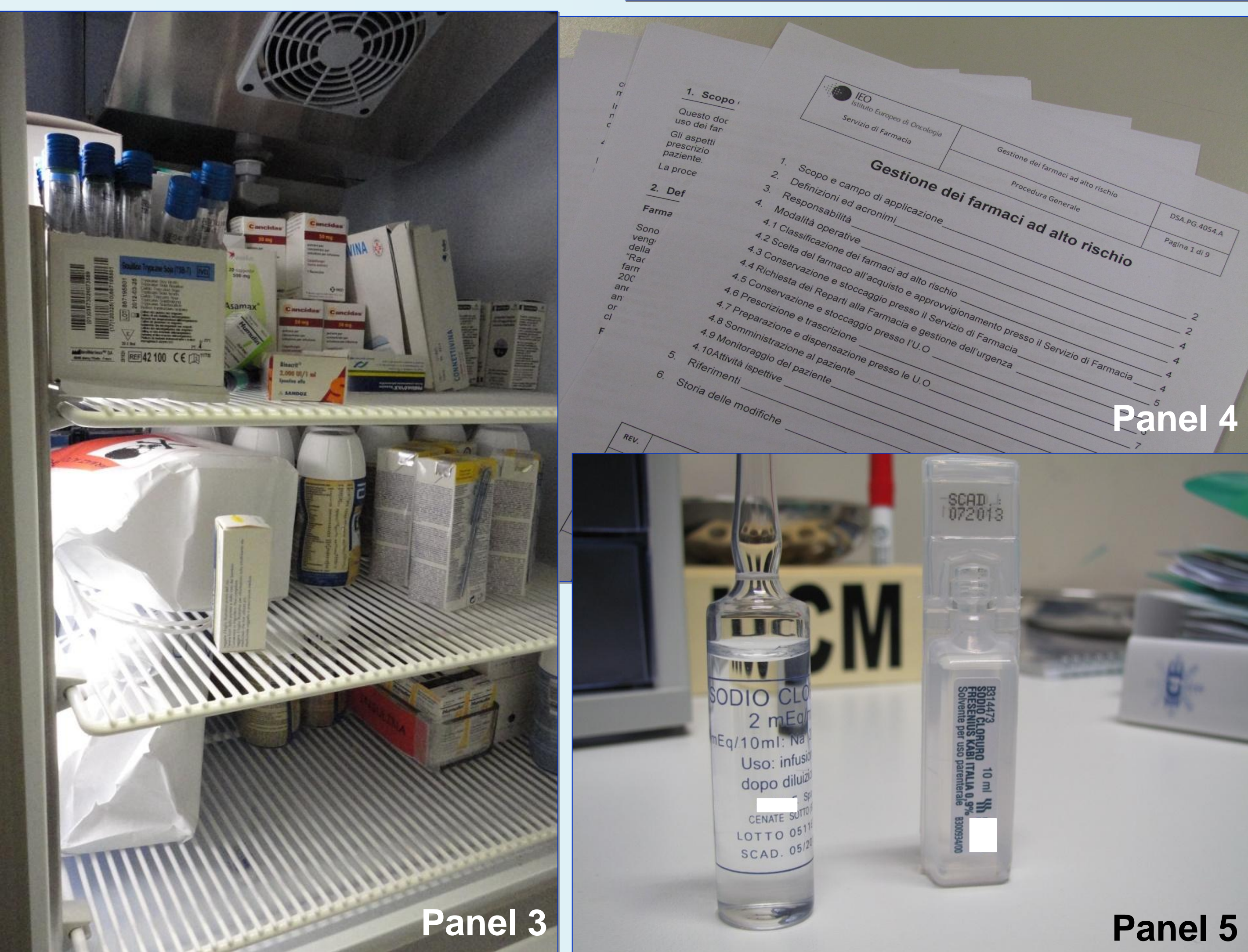
The more important observed problems were:

distraction and confusion in the drug preparation site: too many nurses work on a single shelf, using the same multidose drug and manipulating simultaneously the clinical documentation of different patients, with a high risk of exchange errors; therapy sheets and non-standardized checking of dose, varying from department to department; incomplete medical prescriptions (dose, unit of measure, etc.); poor knowledge or adherence to medication management procedures, in particular of narcotics or concentrated electrolytes; drugs with similar packaging were stocked near (panel 1 and 2); the refrigerators for the storage of temperature controlled drugs were sometimes not suitable for the proper conservation and the drugs were stored without a standardized order, with neighbors often at risk of confusion (panel 3).



Panel 1

Panel 2



Panel 3

Panel 4



Panel 5



Panel 6

Results

Data of completed tests (187 - 86.6% of 216) were reconsidered to highlight the general trend of knowledge at units individual level. From visits 21 findings were detected, of which 15 were non-compliances (NC) that revealed organizational problems, incomplete medical prescription, professional standards not adhered to, lack of standardization of the process of prescription/administration management, lack of knowledge/compliance about narcotics and concentrated electrolytes procedures. Observation and comparison of IEO drugs packaging found that 15.7% of the 731 drugs may be classified as High Alert (115) and 17.7% as LASA(130). From the evidence, we defined a specific procedure for managing high risk medications (panel 4), clarifying a list of drugs considered high-risk in IEO. The list includes adrenergic agents (adrenaline, isoprenaline, noradrenaline), concentrated electrolytes (concentrated sodium chloride, concentrated and concentrated potassium chloride), insulin, heparin, paralyzing agents and narcotics. We also created a list of LASA drugs present in the Institute proposing alternative solutions, different packaging (panel 5) and fewer dosage packagings (panel 6).

Conclusions

With these assessments we defined a specific procedure which governs the management of IEO high alert drugs in order to reduce the occurrence of medication errors, with an impact on the quality of offered service and patient quality of life.

