



MONITORING OF THE INTRODUCTION OF CHLORHEXIDINE RELEASING POLYURETHANE MEDICATION IN PILOT WARDS OF A LARGE CITY HOSPITAL

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Background and importance

Central Venous Catheter (CVC), Peripherally Inserted Central Catheter (PICC), Port-a-cath and Midline are all fundamental systems to manage acute and chronic treatments in both in- and out-patients. Available dressings must provide a protective barrier, avoid the dislocation of these medical devices and be comfortable for the patients. Polyurethane medications chlorhexidine releasing, can prevent bacterial colonisation and, consequently, the occurrence of infections.

Aim and objectives

Objective of the study was to monitor the introduction in some wards of the dressing chlorhexidine releasing and collecting data relating its appropriate use and exit-site.

Material and methods

Basing on the typology of patients and treatments, 4 pilot wards were chosen (Intensive Care Unit, Dialysis, Oncology and Neurosurgery). After team building meetings, an ad-hoc form was introduced and provided to the Internal Pharmacy following every application/change of a dressing and filled with: patient's name and surname, age, diagnosis, type of catheter, treatment, date of first application of the dressing, exit-site and reason for dressing substitution (Fig.1). The form was used to fill an excel database and sum up data using descriptive statistic methods.

Fig. 1 RICHIESTA MEDICAZIONE PER ACCESSI VENOSI CENTRALI

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Reparto _____ Data _____
Paziente _____ Età _____
Numero SDO _____
Diagnosi _____

Tipologia di catetere	Medicazione precedente	FILM POLIURETANO
CVC		MEDICAZIONE TNT
PORT-A-CATH		TEGADERM CHG
PICC		ALTRO (specificare)
MIDLINE		
ALTRO (specificare)		

Data inserimento catetere: _____ Terapia in atto

N.B.

IDRATAZIONE	
NEF	
CHEMIOTERAPIA	
INFUSIONE DI FARMACI AD ALTA OSMOLARITA'	
ALTRO (specificare)	

Condizione dell'exit-site (Visual Exit-site Score VES)

Grado 0: la cute a livello del sito di inserzione si presenta sana, integra e non sono evidenti segni di flogosi
 Grado 1: iperemia dell'exit site < 1cm x fibrina
 Grado 2: iperemia dell'exit site > 1cm x fibrina
 Grado 3: iperemia, secrezione, pus x fibrina > 2cm

MEDICAZIONE RICHIESTA:
TEGADERM CHG
 Tempo di permanenza minimo, salvo saturazione: 48h
 Tempi di sostituzione: ogni 5-7 giorni (pz critico 4-5 gg)

Motivo della sostituzione della medicazione:

termine dei 5-7 giorni
 medicazione staccata
 medicazione bagnata
 medicazione sporca
 dolore
 saturazione tampone
 altro (specificare): _____

Firma del Richiedente: _____

Data: _____ Quantità: _____ Firma della Farmacia: _____

Fig. 2 WARDS' MEDICATION DISTRIBUTION PROPORTION

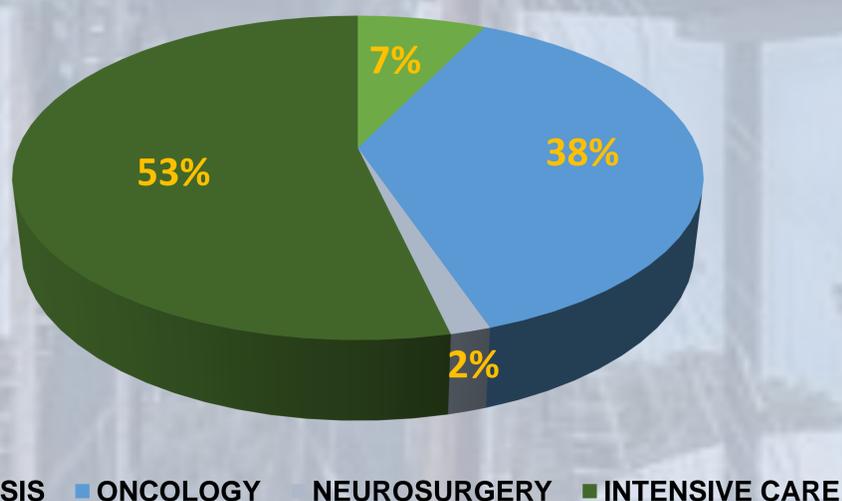
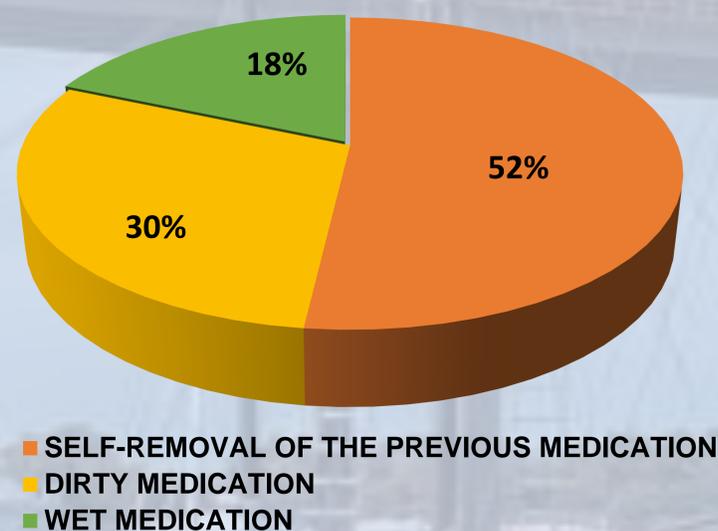


Fig. 3 27 MEDICATIONS OF 149 CHANGED IN ADVANCE



Results

From October 2018 to June 2019, the dressing was used on 126 patients (55% men N=69): 54% (N=67) in Intensive Care Unit, 38% (N=47) in Oncology and 7% (N=9) in Dialysis (Fig.2). 13 patients with an exit-site grade (G)>0 were applied the medication: 7 of them from Dialysis had a 1≤G≤3 already present at the first application, 4 in Oncology and 2 in Intensive Care developed a G=1, that lasted for a single application and then regressed to G=0. The average days of application of the medication was 6. Out of the 290 chlorhexidine-containing dressings provided to the Units, 27 were changed before the 7th day (maximum time of permanence in place): 52% (N=14) because of "self-removal of the previous dressing", 30% (N=8) due to "dirty medication" and 19% (N=5) since the dressing was "wet" (Fig.3).

Conclusion

In 219 out of 231 cases, at dressing replacement, the exit-site was G=0, suggesting that this medication may have helped the preservation of skin integrity. In dialysed and oncologic patients, the exit-site grade is more difficult to manage, probably due to the complexity of pathology and therapy.

