

respectively. 155 ± 16 s, 221 ± 12 s and 240 ± 6 s were needed to achieve complete thawing of 250 mL bags filled at 30, 40 and 50 mL, respectively. For a type of bag, decreasing volumes thawed faster, but 50 mL bags filled at 20 mL took longer to thaw than 250 mL bags filled at 30 mL (different spatial conformation and specific surfaces). Delivery of thawed bags from the pharmacy to the transplant unit was done in 4.5 ± 0.21 min.

Conclusion and relevance Thawing duration may vary by twice a function of volume. Mean lengths provide an optimal organisation in a circuit where every minute must be taken into account. A total thawing-addressing time rate of between 6.5 and 8.5 min means that the nursing team has almost 20 min to administer tisagenlecleucel.

REFERENCES AND/OR ACKNOWLEDGEMENTS

Conflict of interest No conflict of interest

5PSQ-108 SECURISING OF TISAGENLECLEUCEL (KYMRIAH) STORAGE

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Background and importance Tisagenlecleucel is available in frozen bags stored and shipped under -120°C . The Summary of Product Characteristics (SPC) allowed storage in a cryogenic freezer (vapour phase of nitrogen (LN2) is cited only as an example). As the pharmacy does not have LN2 storage facilities, tisagenlecleucel bags are stored in a freezer set at -150°C . With only one freezer available, another freezer located in the biological haematology laboratory was chosen as a back-up freezer in case of failure.

Aim and objectives The aim of this work was to validate the thermal performance of the container transfer system between our facility and our back-up ones.

Material and methods Freezer and rooms were equipped with Cobalt2 sensor, with Thermoserver software allowing monitoring, temperature recording, and triggering of the alarm in case of temperature excursion. A Cryoexpress polystyrene transport container was preloaded with 10×100 mL sodium chloride bags and one aluminium cassette used for tisagenlecleucel bag storage in order to mimic real-life conditions. The transport container was equipped with an Emerald sensor, with Oceaview software allowing real-time monitoring of the temperature inside the container. The transport container was placed inside the freezer, the cover was opened, and the temperature was set on -140°C in order to mimic a temperature excursion. After temperature stabilisation, the freezer was opened, the container was hermetically closed and the temperature inside it was measured every 30 s until an overrun of -120°C . Two situations were tested: the container left at room temperature ($+20^\circ\text{C}$), and, in order to mimic the worst case scenario, left in a room maintained at $+30^\circ\text{C}$. Each measurement was done in duplicate. Measurement of transfer time from the pharmacy to the back-up freezer was done by two different operators in triplicate.

Results Whatever the external temperature, conditions needed by the SPC is maintained for more than 25 min (28 min and

33.5 min for an external temperature of $+20^\circ\text{C}$ and $+30^\circ\text{C}$, respectively). The transfer time from the pharmacy to the biological haematology laboratory was 3.25 ± 0.25 min.

Conclusion and relevance Transfer duration to the back-up installation is far lower than the time for which an optimum storage temperature for tisagenlecleucel is maintained with our transport system.

REFERENCES AND/OR ACKNOWLEDGEMENTS

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5PSQ-110 OMEPRAZOLE DEPRESCRIPTION PROJECT IN A SOCIAL HEALTH CENTRE WITH A DEPOSIT OF MEDICINES ASSOCIATED WITH A HOSPITAL PHARMACY SERVICE

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Background and importance The use of omeprazole has become very frequent in recent years, not being indicated on many occasions, so deprescription is necessary to reduce the possible associated adverse effects.

Aim and objectives Analyse the adequacy of omeprazole treatment in institutionalised elderly patients in a social health centre.

Recommend deprescription or dose reduction in susceptible patients.

Material and methods Review of all patients treated with omeprazole in the social health centre. The data were obtained from the electronic prescription and the medical history. Data collected: age, sex, dose, duration of treatment, indication, concomitant medication and interactions. Risk factors for bleeding were also analysed in patients older than 65 years: potentially gastrolesive drugs: anticoagulants, anti-aggregants, non-steroidal anti-inflammatory drugs (NSAIDs), corticosteroids and selective serotonin reuptake inhibitors (SSRIs) and a history of peptic ulcer.

The deprescription criteria were: no indication for use, duration of treatment exceeds the technical data sheet, and absence of gastrolesive drugs that justify the association of omeprazole.

The pharmacist's recommendations were carried out in the electronic prescription program and the analysis of acceptance/rejection of the interventions took place 1 month afterwards.

Results 38 patients were being treated with omeprazole. Mean age was 84 years and 74.4% were women.

45% (17 patients) did not meet the criteria for the use of omeprazole; 16 patients were proposed for deprescription and 1 for minimum dose.

Of the 17 patients, 5 (29.4%) took omeprazole for an indicated use but all exceeded the duration recommended.

Regarding the use of potentially gastrolesive medication: 7 patients (41.2%) were being treated with NSAIDs, 5 (29.4%) with SSRIs and 2 (11.7%) with acenocoumarol, but none of them were being treated with acetylsalicylic acid or with associations of high risk of bleeding, so the use of omeprazole was not justified.

One month later, 35.3% (6/17) of the interventions have been accepted, suppressing omeprazole from treatment in 5 cases and reducing to a minimum dose in 1 case.

Conclusion and relevance Omeprazole is a well-tolerated drug, but when used for prolonged treatment it can cause serious problems, so its evaluation is decisive to correct a possible misuse of the drug. This analysis reveals that 45% of the centre's patients do not meet the appropriate criteria for the use of omeprazole.

REFERENCES AND/OR ACKNOWLEDGEMENTS

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5PSQ-112 HIDDEN HARM? ASSESSING MAGNITUDE AND COSTS OF INTRAVENOUS THERAPY ADMINISTRATION ERRORS VIA SMART PUMP REPORTS

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Background and importance Most reviews of intravenous therapy administration error have been undertaken in critical care. In our study wireless pumps gave access to smart pump therapy library log data from lower acuity areas of care such as oncology infusion centres, labour and delivery, and medical-surgical wards. Analysis of the magnitude and costs of errors in these areas has previously been lacking.

Aim and objectives To establish likely incidence of moderate and catastrophic intravenous therapy administration error via 'good catch' data in areas outside of critical care, to identify and classify the medications involved and to estimate likely costs of these errors.

Material and methods A review of 3 025 414 dose error reduction system protected infusions from adult units outside of critical care across the Middle East for the volume of averted dose/duration errors was undertaken, and a recognised grading of 'moderate' and 'catastrophic'¹ was applied. Projected savings from errors prevented was assessed against current intensive care unit (ICU) bed and medical ward costs in the Gulf region² and an average length of stay extension identified from the current literature.¹

Results Catastrophic errors averted would cost, conservatively, US\$114 503 per 10 000 infusions delivered. The average 1000 bed hospital delivery ≈750 000 infusions per annum.

Conclusion and relevance The study identified an incidence rate above those in many published studies; this may be because we 'cast the net wider' and because in the areas studied there was limited clinician experience of administration of some of the medications. Competency is difficult to maintain with limited exposure to a task. The presence of insulin, potassium preparations, and cytotoxics in our results is in line with other studies. The cost savings indicate the potential value of smart intravenous technology being deployed in every part of the hospital

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5PSQ-116 MEDICATION-RELATED FOLLOW-UP OF OLDER PATIENTS AFTER HOSPITAL DISCHARGE: A MULTICENTRE RETROSPECTIVE CHART REVIEW

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Background and importance The discharge of older hospitalised patients is critical in terms of patient safety, and is partly related to transfer of information about medications from hospitals to the next healthcare provider in primary care. There are to our knowledge no previous studies evaluating information transfer and follow-up, at patient discharge, in a setting where a shared electronic health record (EHR) is used.

Aim and objectives To evaluate the prevalence of patients for whom hospitals sent adequate requests for medication-related follow-up at hospital discharge, the proportion of patients revisiting hospital because of inadequate information and follow-up requests, and the possibility of an association between medication reviews performed during hospitalisation and inadequate follow-up requests.

Material and methods We conducted a retrospective chart review. The study population was randomly selected from a cluster-randomised crossover trial which included patients 65 years or older admitted to four hospitals during 2017–2018. Our study was conducted in regions using a shared electronic health record between hospital and primary care. Each patient was assessed with respect to the adequacy of the request for follow-up. For patients with inadequate requests, data about unplanned hospital revisits were collected, and an assessment made whether the inadequate requests had contributed to the revisits. The association between medication reviews and inadequate requests was analysed with a Chi-square test.

Results A total of 699 patients were included. The patients' mean age was 80 years; an average of 10 medications were prescribed on hospital admission. The hospitals sent adequate requests for 418 (60%) patients. Thirty-eight patients (14%) had a hospital revisit within 6 months of discharge related to

Abstract 5PSQ-112 Table 1

Therapy Type	Moderate Totals n. (% vs. DERS Infusions)	Catastrophic Totals n. Magnitude: Times Maximum Rate/Dose				All Catastrophic Totals n. (% vs. DERS Infusions)
	Magnitude: Times Maximum Rate/Dose	10-99999	100	1000		
IV Fluids	35,572 (1.1758)	23	259	4	9	295 (0.009)
Simple Analgesia	10,844 (0.3584)	62	641	4	53	760 (0.0251)
Antivirals, General Antibiotics and Antifungals	20,277 (0.6702)	84	950	33	67	1,134 (0.0375)
Blood Products	35,830 (1.1843)	325	20	0	4	349 (0.0115)
Chemotherapy and Cytotoxic	11,422 (0.3775)	37	166	4	31	238 (0.0079)
Anticoagulants	2,688 (0.0888)	12	305	24	60	401 (0.0133)
Insulin	313 (0.0103)	31	77	6	37	151 (0.0050)
Electrolytes (K ⁺ and Mg ²⁺)	17,918 (0.5922)	114	725	0	18	857 (0.0283)
GI System	5,688 (0.1880)	153	1,187	5	11	1,356 (0.0448)
Labor and Delivery Meds	111 (0.0037)	6	33	0	5	44 (0.0015)
Aminoglycosides	2,286 (0.0756)	13	179	0	5	197 (0.0065)
Diuretics	549 (0.0181)	34	63	4	38	139 (0.0046)
Steroids	24 (0.0008)	0	0	2	0	2 (0.0001)
Total/All Adult	143,522 (4.7439)	894	4,605	86	338	5,923 (0.1958)