

EVALUATION OF PROFESSIONAL PRACTICE ON THE MANAGEMENT OF CHEMOTHERAPY INDUCED NAUSEA AND VOMITING

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INTRODUCTION

- Nausea and vomiting are undesirable side effects of cytotoxic chemotherapy.
- In 2009, new guidelines on prevention and treatment of nausea and vomiting induced by chemotherapy were issued.¹
- In the context of the V2010 certification of Robert Ballanger hospital, a first evaluation of professional practice in drug therapy for patients with lung cancer was performed. It has result in an appreciation of treatment conformity while applying the new recommendations.
- Corrective measures were issued after this first evaluation.

PURPOSE



Effectiveness evaluation of the improvement measures put in place and of the ameliorations induced by following the new recommendations.

MATERIALS AND METHODS

Foresight inquiry

Over 2 months

Reuse of the 2010 questionnaire's concerning patients prescriptions

Data collection done by the pharmaceutical team during day care or conventional hospitalization **Results analysis**

DI-003

Comparison with those of 2010

Chi square test with Yates correction if necessary and Fischer test at α risk of 5%

DISCUSSION **RESULTS AND**

	2013			
	33 surveys		Patient received the c	
2010	2013	Statistical	"no", cure received	
2010	differe			
29 (85%)	21 (64%)	S	Patient received in	
5 (15%)	12 (36%)	significant	received during conven	
62,3 years	63,6 years		Cure administration on	
69,5 kg	69,2 kg	NS	"no", dav	
07 C	01 1			
87,0	81,1		Computerized antie	
		Significant	prescri	
96,7	90,0		Antiemetic preme	
	5 (15%) 62,3 years 69,5 kg 87,6	2010 2013 29 (85%) 21 (64%) 5 (15%) 12 (36%) 62,3 years 63,6 years 69,5 kg 69,2 kg 87,6 81,1 96 7 90 0	33 surveys 2010 2013 Statistical differences 29 (85%) 21 (64%) S 5 (15%) 12 (36%) significant 62,3 years 63,6 years NS 69,5 kg 69,2 kg NS 87,6 81,1 non significant	

	2010	2013	Statistical
	Yes		differences
Patient received the cure the same day (if "no", cure received the day before)	34 (100%)	32 (97%)	
Patient received in day care (if "no", eceived during conventional hospitalization)	33 (97%)	31 (94%)	
Cure administration on the scheduled day (if "no", day shift)	27 (79%)	30 (91%)	NS
Computerized antiemetic treatment prescription	34 (100%)	33 (100%)	
Antiemetic premedication protocol	34 (100%)	33 (100%)	

	2010 2013)13	Statistical differences	
Number of hospitalization days for the protocol (day per patient)	1,18		1,10		NS
Number of molecules per protocols (molecules per patient)	1,68		1,66		NS
Average time of Intravenous therapy of the cisplatin (min)	101,19		80,00		S
Fractionation of the cisplatin needed	yes	no	yes	no	
	1 (8%)	11 (92%)	1 (6%)	16 (94%)	NS

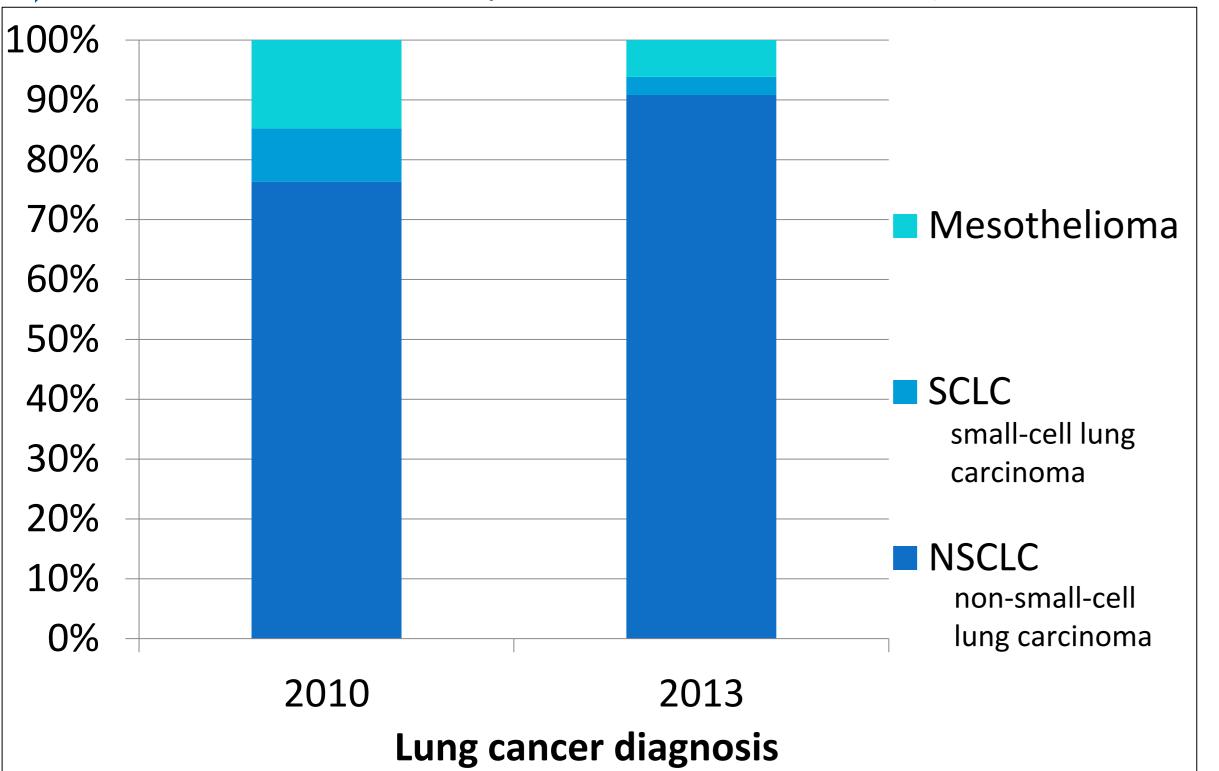
The proportion of women (36%) is higher than in 2010 (15%) but no difference was observed in the average age and the mean creatinine clearance.

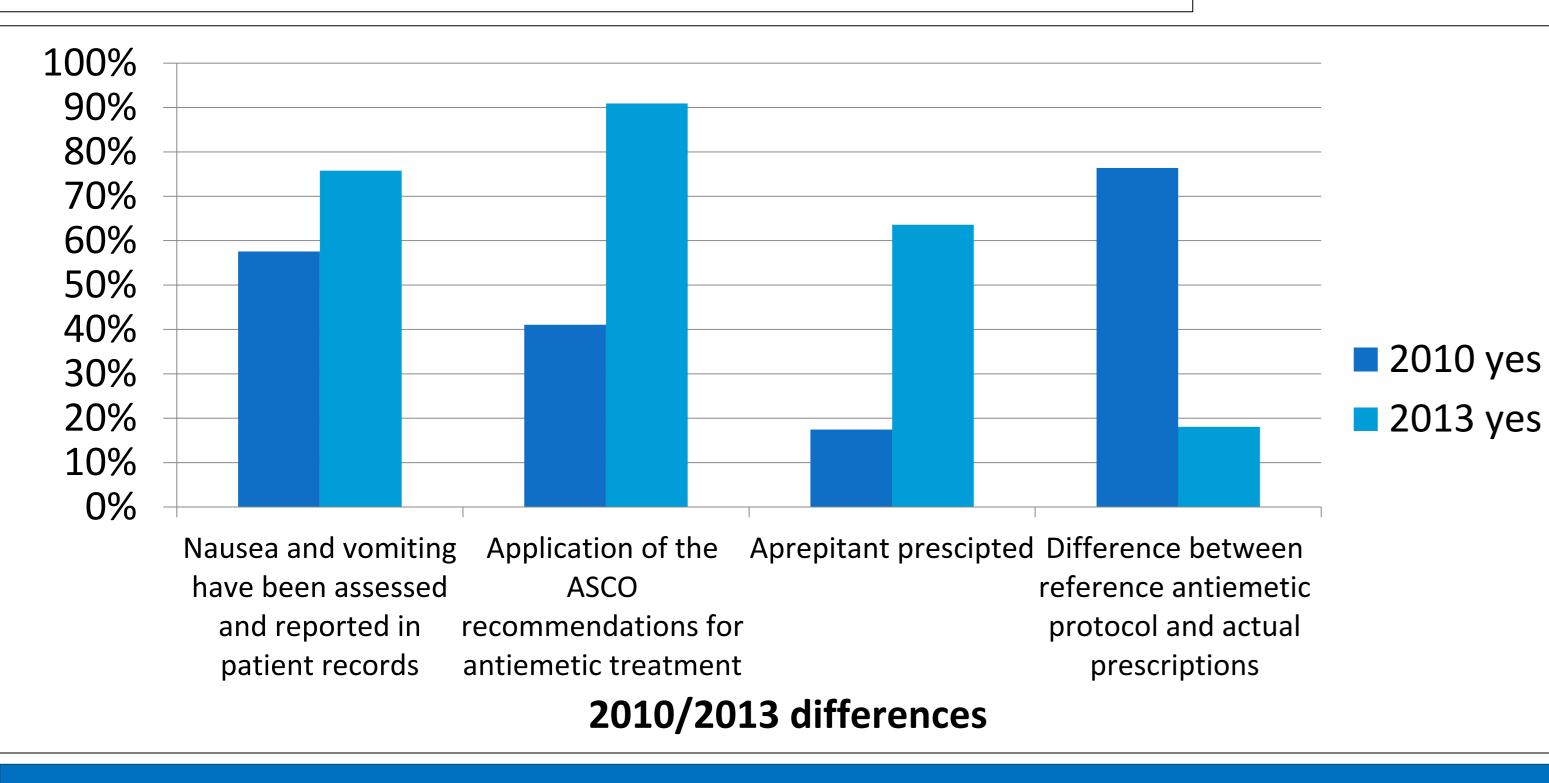
Almost all the patients have received their cure the same day, as scheduled.

Computerized antiemetic treatment prescription for all patients.

Average number of days at the hospital, average number of molecules per protocol, and proportion of fractionation of the cisplatin are no different. The average passing time of the cisplatin is different.

The two studies are comparable.

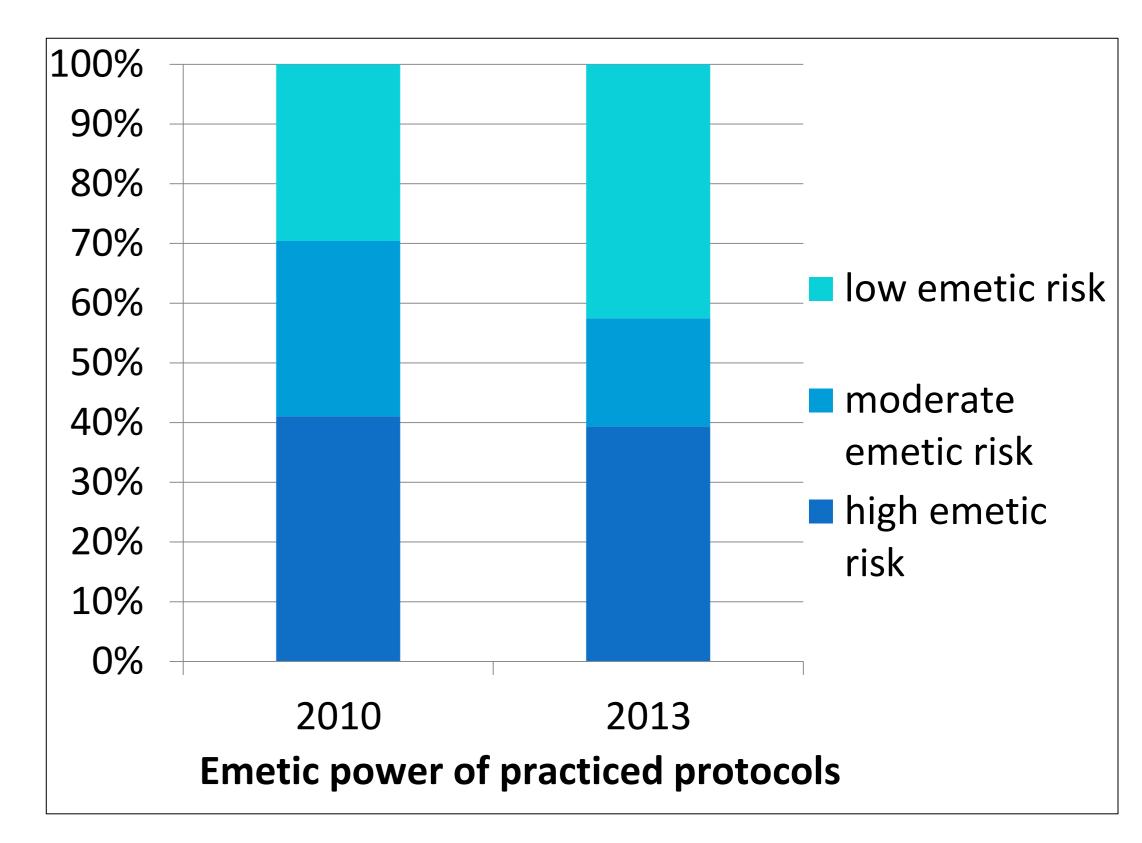




No differences between the two studies.

The diagnoses distribution and The emetic power of practiced protocols are the same.

The two studies are comparable.



Nausea and vomiting are better assessed and reported in patient records (58% in 2010 to 76% in 2013).

An improvement in the applications of the new recommendations and those of the ASCO (American Society of Clinical Oncology) for antiemetic

treatment including a prescription of aprepitant increase were observed (p <0.001).

Less difference between reference antiemetic protocol and actual prescriptions are observed (p < 0.001).



The modifications made in 2010 : change of anti-emetic protocols in the Chimio[®] software and implementation of a prescription model, based on the emetic protocol, have had a positive impact and helped improving drug therapy of nausea and vomiting induced by chemotherapy. The new recommendations are better applied including the prescription of aprepitant, optimizing cares. However, standardization of care must not compromise the individual adaptability of anti-emetic patient therapy.

¹J-P Durand, I Madelaine, F Scotté.Recommandations pour la prévention et le traitement des nausées et vomissements induits par les chimiothérapies - Bulletin du Cancer. Volume 96, Numéro 10, 951-60, octobre 2009

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