A study of the effects of olanzapine against nausea in our department

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Introduction

- ✓ In cancer therapy, there are nausea and vomiting as side effects that patients feel strongly as distress.
- ✓ Currently the mechanism of emesis is also clarified, but it has not been controlled sufficiently yet.
- ✓ In NCCN guideline 2015, instead of aprepitant, an option to use olanzapine, a psychotropic drug with multiple receptors action, in combination with palonosetron and dexamethasone was presented.

Objectives

- ✓ We examine backwardly the antiemetic effect of olanzapine in regimen using anthracycline drug in our department.

Patients and Method

- ✓ 30 cases of primary breast cancer patients who underwent preoperative or postoperative adjuvant therapy using anthracycline drug from April to December, 2017.
- ✓ The median age was 46 years (30 to 61).
- ✓ we decided to use olanzapine as an antiemetic 19 patients were used.

Regimen

FEC100 : Epirubicin (100mg/m²)
Cyclophosphamide (500mg/m²)
5-FU (500mg/m²)
TAC : Docetaxel (75mg/m²)
Doxorubicin (50mg/m²)
Cyclophosphamide (500mg/m²)

Antiemetics

Aprepitant (125mg on Day 1, 80mg on Days 2-3)
Palonosetron (0.75mg on Day 1)
Dexamethasone (9.9mg intravenous infusion on Day 1 and 8mg orally on Day 2-5)

- Olanzapine : 2.5mg/day on Days 1-7

Results

Factors	n	%	Factor	n	%
≥50	7	36.8	Metastatic stage		
≥40, <50	7	36.8	M0	19	100
<40	5	26.4	M1	0	0
Tumor stage			TNM stage		
Tis	0	0	0	0	0
T1	9	47.4	I	5	26.4
T2	7	36.8	IIA	4	21.0
T3	1	5.3	IIB	3	15.8
T4	2	10.5	IIIA	4	21.0
Nodal stage			IIIB	0	0
N0	8	42.1	IIIC	3	15.8
N1	6	31.6	IV	0	0
N2	3	15.8			
N3	2	10.5			

Factors	n	%	Factor	n	%
ER status			Intrinsic subtype		
positive	12		Luminal-A	1	5.3
negative	7		Luminal-B		
PgR status			(HER2 negative)	4	21.0
positive	6		Luminal B		
negative	13		(HER2 positive)	6	31.6
HER2			HER2 enriched	5	26.3
positive	10		Triple negative	3	15.8
negative	9				
Ki-67 LI			Regimen		
≤ 20%	2		FEC100	15	78.9
> 20%	17		TAC	4	21.1

- ✓ Number of cycles that started administration of olanzapine

	FEC100	TAC
Cycle 1	7	1
Cycle 2	6	3
Cycle 3	2	0
Cycle 4	0	0
Cycle 5		0
Cycle 6		0

- ✓ Change in nausea due to the effect of olanzapine

※Improvement of Grade CTCAE v4.0 of nausea was improved

Conclusion

- ✓ In adjuvant chemotherapy, it is necessary to take into consideration the balance between maximum therapeutic intensity and minimal adverse reaction symptoms and try to prevent recurrence.
- ✓ Nausea and vomiting is a representative side effect, and control over it has an important role in the progress of drug therapy afterwards.
- ✓ Olanzapine, together with a marked antiemetic effect, could help smooth progress of cancer drug therapy.

Reference

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