Efficacy and safety of olanzapine combined therapy for cervical cancer patients receiving 6 weeks of chemoradiotherapy resistant to triplet antiemetic therapy

Shizuoka Cancer Center Hospital Division of Gynecology
Yuka Kasamatsu, Masakazu Abe, Nobuhiro Kado, Emi Yoshioka, Ayako Mochizuki, Nobutaka Takahashi , Munetaka Takekuma, Yasuyuki Hirashima

INTRODUCTION

- CCRT (Concurrent Chemoradiotherapy) for Cervical Cancer
 - (1) curative therapy for stage I B2-IVA
 - (2) adjuvant therapy of post surgery
- JGOG1066 (Int J Gynecol Cancer 2012; 22: 1420-1426)
 - Whole-pelvis EBRT* ...daily fractions of 1.8 or 2.0 Gy 5 days a week (total of 50 or 50.4 Gy)
 - HDR-ICBT** ...once a week with a fraction dose of 6 Gy (total of 18 or 24 Gy)
 - CDDP*** ...40mg/m² once a week for 5 times during radiation period

* External Beam Radiation ** High-Dose Rate Intracavitary Brachytherapy *** Cisplatin

Anti-emesis Guideline of CDDP

	ASCO	NCCN	MASCC
≥50mg/m ²	High	High	High
<50mg/m ²	High	Moderate	High
Multiple day	High	-	Moderate
Weekly	?	?	?

- Moderate risk → 5-HT₃RA + DEX
- High risk → 5-HT₃RA + DEX + NK-1RA

The GAND-emesis study (Lancet Oncol 2016; 17: 509-518)
For 5 weeks of CCRT in 234 patients with cervical cancer

5-HT₃RA + DEX + Placebo
VS
5-HT₃RA + DEX + NK-1RA

The efficacy of triplet antiemetic therapy was revealed.
But the proportion of patients with sustained no emesis was 65%.

OLANZAPINE

- MARTA : multi-acting-receptor-targeted-antipsychotic
- High permeability across the blood brain barrier.
- Extrapyramidal symptom and akathisia are very few.
- Although olanzapine is not a conventional antiemetic, it exhibits a strong antiemetic effect.

OBJECTIVE

- The aim of this retrospective study is to evaluate the preventive effect of olanzapine for the prevention of nausea and vomiting caused by 6 cycles of weekly CDDP combined with radiotherapy when used with triplet antiemetic therapy.

METHODS

CONCLUSIONS

■ Preventive use of olanzapine combined with triplet antiemetic therapy showed improvement in control of refractory nausea in patients receiving CCRT with weekly cisplatin.

RESULTS

- 21 patients were received olanzapine.
- Observation period was 84 months.
- Grade2 drowsiness was seen in 3 patients as adverse effects.

Table 1. Patients characteristics	* Median (range)
N=21	
Age (years) *	53 (33-71)
Prior chemotherapy	1 (0.5%)
Adjuvant therapy	0
Curative therapy	21 (100%)
CDDP dose (mg/m ²)	30-40
Total external beam radiation (Gy) *	50.4 (45-70.2)
Brachytherapy	19 (90%)
Radiotherapy field	
Whole pelvic	16 (76%)
Extended field	5 (24%)
Timing of grade 2-3 nausea despite triplet antiemetic therapy	
Cycle 2	8 (38%)
Cycle 3	6 (28%)
Cycle 4	2 (10%)
Cycle 5	2 (10%)
Cycle 6	3 (14%)