



Analysis of Self-recorded chemotherapy induced peripheral neuropathy by Ovarian Cancer Patients

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Background

Surgery is the primary treatment in ovarian cancer and supplemented by chemotherapy. CP intravenously (Carboplatin combine with Paclitaxel) is the first regimen. Neurotoxic drugs are widely used, caused peripheral neuropathy. Peripheral limb numbness, burning and tingling are major signs, even affected balance to falls, moreover, it interfered with patient's emotions, sleep, mobility and life quality.

Purpose/ Methods

This study aimed to realize the peripheral neuropathy as the chemotherapy side effects in ovarian cancer patients. This prospective longitudinal design has purposive samplings from the ovarian cancer patients who had chemotherapy from a medical center in southern Taiwan. The study samples are 129, six chemotherapy courses were collected. From Day 1 to Day 10 of every chemotherapy course, the situations of peripheral neuropathy were recorded daily such as extremity numbness and pain.

Results

CP intravenously treatment is the major regimen (50.4%), followed by CLD (Carboplatin +Liposomal Doxorubicin) regimen (20.9%). extremity numbness and pain incidence is 65.3%, the peak occurred in the third course and continued until the sixth course of treatment. In the 10 observation days, the limb pain incidence increased from 5 days in the first course to 7-8 days in the sixth course, which increased significantly by therapy course. The incidence of CIPN from chemotherapy was in order of CP> CLD.

table 1: Compare the number of chemotherapy treatment, observation for several days, the difference between chemotherapy drugs and incidence of Extremity pain

extremity numbness and pain	Incidence	t	p	95% CI	
				Lower Bound	Upper Bound
The first day of the first course of other drugs	25.7%	10.24	.000	.21	.31
2nd course / 1st course	16.0%	8.78	.000	.12	.20
3rd course / 1st course	22.6%	12.27	.000	.19	.26
4th course / 1st course	24.8%	12.99	.000	.21	.29
5th course / 1st course	22.9%	11.50	.000	.19	.27
6th course / 1st course	25.6%	11.91	.000	.21	.30
Day2 / Day1	2.2%	.86	.388	-.03	.07
Day3 / Day1	5.9%	2.28	.023	.01	.11
Day4 / Day1	9.2%	3.58	.000	.04	.14
Day5 / Day1	10.8%	4.19	.000	.06	.16
Day6 / Day1	9.5%	3.70	.000	.04	.15
Day7 / Day1	8.9%	3.45	.001	.04	.14
Day8 / Day1	6.8%	2.65	.008	.02	.12
Day9 / Day1	9.2%	3.58	.000	.04	.14
Day10 / Day1	8.1%	3.14	.002	.03	.13
CP/ Others	22.2%	13.30	.000	.19	.25
CLD/ Others	13.0%	6.81	.000	.09	.17
CT/ Others	0.8%	.33	.739	-.04	.06

Abbreviations : CP, Carboplatin / Paclitaxel ; CLD, Carboplatin / Liposomal Doxorubicin ; CT, Carboplatin / Topotecan

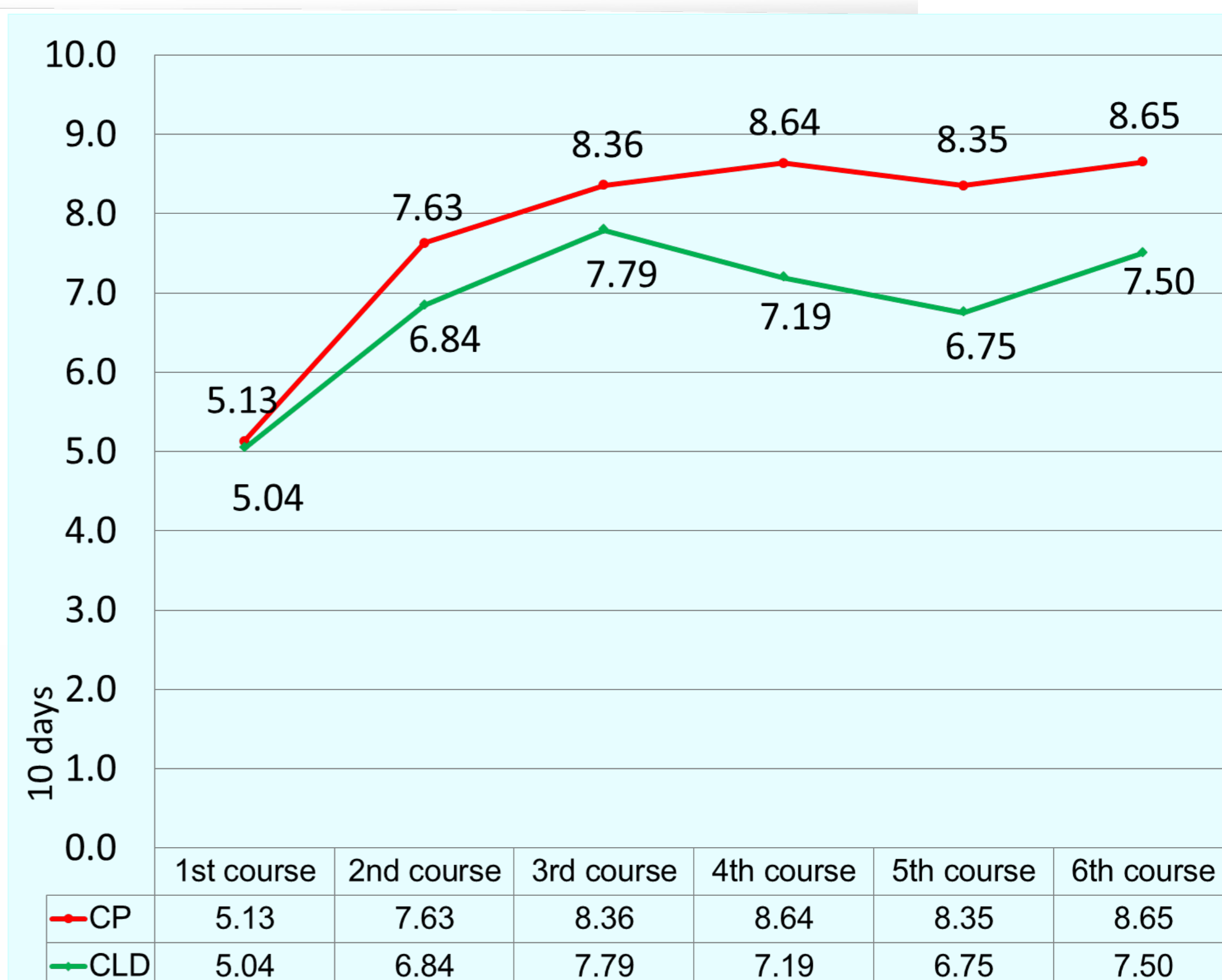


Fig. 1 Comparison of the number of courses of chemotherapy and CP, CLD and the number of days of extremity numbness and pain in chemotherapy drugs

Conclusions

CP (Carboplatin combine with Paclitaxel) regimen caused the highest incidence of CIPN, the severity of symptoms are related by the dose and duration of chemotherapy. It also affects patients' mobility and life quality; therefore the medical staff should assess side effects duly in order to adjustment drug doses.

Key word:ovarian cancer, chemotherapy, side effects ,CIPN

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