

Nonsteroid Anti-inflammatory Agents for the Management of Cold Sweating in Advanced Cancer Patients

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Purpose: Advanced cancer may develop cold sweating as paraneoplastic symptom. Few research was performed on the efficacy of non-steroid anti-inflammatory drug (NSAID) in advanced cancer patients suffering from sweating without fever. **Methods:** Patients were selected who met following criteria and medical records were retrospectively reviewed. 1) incurable, advanced solid cancer 2) Suffering from cold sweating more than numeric rating scale(NRS) 4 3) No evidence of infection 4) No newly started opioid or antihormonal agents within 1 month 4) NSAID prescription for the management of cold sweating 5) Documented NRS information before and after NSAID **Results:** A total of 17 patients were selected and four patients were excluded for the lack of NRS information or fever. Nine patients(69%) were male and mean age was 59(range:50-71). Bile duct cancer was most common primary tumor followed by pancreatic cancer, gastric cancer and prostate cancer. Mean Baseline NRS of cold sweating was 6.5(min-max:4-10) was reduced to NRS 1.9 at the next follow-up assessment(min-max:0-5).The difference of severity between baseline and follow-up evaluation was significant(95% confidence interval;3.3-6.0, $p < 0.001$). Mean period from initiation of NSAID and the next follow-up time was 9.1 days (range:2 days-30 days). **Conclusions:** NSAID was effective medication for the management of advanced cancer patients who had significant sweating without fever.

Table 1. Clinical information on cold sweating severity and medication

Case No	Baseline NRS	* F/U NRS	F/U time (days)	Chemotherapy	Medication	OS (months)
No 1	8	0	2	No	Ibuprofen 400mg tid	1.8
No 2	10	0	3	No	Acetaminophen 650mg tid	0.4
No 3	5	0	8	Yes	Ibuprofen 400mg tid	9.6
No 4	7	4	9	No	Ibuprofen 400mg tid	13.4
No 5	7	4	8	Yes	Ibuprofen 400mg tid	5.7
No 6	5	1	2	No	Naproxen 500mg bid	0.9
No 7	9	5	7	Yes	Naproxen 500mg bid	22.1
No 8	4	0	2	No	Naproxen 500mg bid	0.4
No 9	6	0	9	Yes	Ibuprofen 400mg tid	7.7
No 10	6	3	30	No	Ibuprofen 400mg tid	9.6
No 11	5	1	15	Yes	Ibuprofen 400mg tid	7.6
No 12	6	4	21	No	Naproxen 500mg bid	2.9
No 13	7	3	2	No	Celecoxib 200mg bid	0.4

* F/U: follow-up

Predictive factors of survival benefit from rechallenging chemotherapy in advanced NSCLC

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Objective: Salvage treatment for relapsed non small cell lung cancer remains unsatisfactory despite of development of new agents. Approximately, 10% of patients have an intervaltime after concluding first-line platinum-based chemotherapy greater than 6 months. These patients may achieve high-tumor responses when the same regimen is again used in second-line treatment. We conducted retrospective study of rechallenging cytotoxic chemotherapy. **Methods:** Patients with advanced/metastatic non-small cell lung cancer who had achieved disease control with initial cytotoxic treatment, followed by rechallenge with the same chemotherapeutic agents upon disease progression were included. **Results:** In total, thirty-five patients were included during the period from 2007 to 2013 at National Cancer Center. Readministered regimens were consisted with either platinum doublets (pemetrexed plus platinum, gemcitabine plus platinum, or irinotecan plus platinum), or taxane (docetaxel). After the rechallenge, 5 patients (16.1%) achieved partial remission (PR), 17 (54.8%) achieved stable disease (SD) and 9 (29.1%) experienced progressive disease. The treatment was generally well tolerated, with a low rate of toxicity. The median progression free survival (PFS) was 4.2 months with the rechallenge. Patients with a PFS of ≥ 6 months with initial treatment exhibited longer PFS and overall survival (OS) with the rechallenge compared to those with a PFS of < 6 months with initial treatment free interval (PFS: 5.2 ± 0.1 vs. 4.8 ± 0.2 months, respectively; $p = 0.041$; and OS, 37.3 ± 7.2 vs. 18.8 ± 2.1 months, respectively; $p = 0.005$). The time from the termination of initial PBC to disease progression was also associated with survival after the rechallenge. However, the response to initial chemotherapy (CR + PR vs. SD) and the time from the termination of initial treatment to disease progression did not affect PFS after the rechallenge. **Conclusions:** Our results demonstrated that rechallenge with chemotherapy was well tolerated and survival after the rechallenge was associated with survival during initial chemotherapy. Therefore, rechallenging chemotherapy represents a useful therapeutic option for selected patients.