A new management model of oral outpatient chemotherapy featured by concerted interventions by physicians and pharmacists

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Background: In the oral outpatient chemotherapy, patient’s recognition and self-management of adverse drug effects (ADEs) are of critical importance, though, measures for continuous care and a good patient education in this field has not been fully explored in Japan.

Methods: We conducted a prospective observational cohort study which was approved by the NCCH’s institutional review board. The inclusion criterion was the patients treated with S-1 as a single agent or in combination with other agents. In the management process, the patients received clinical pharmacist’s counseling after check with a physician, and then community pharmacist’s follow up telephone call once or more a week until their next hospital visiting. Throughout the interventions, both pharmacists focused on drug-related problems (e.g. any obstacles to adherence, early ADEs), gave them counseling, and provided the physician with feedback when appropriate. We set the feasibility of management as the primary outcome, and medication adherence, all ADEs, pharmacist’s recommendations accepted by physicians, and patient satisfaction as secondary ones.

Results: Among 23 eligible patients, 20 (with colorectal, pancreatic, or biliary cancers) agreed to participate in and 10 completed the intervention. Of all the participants, 14 were treated with S-1 monotherapy, while the others were with SIRB (S-1, irinotecan, and bevacizumab) or SOX/Bv (S-1, oxaliplatin, and bevacizumab). The completion rate of the intervention was 100% (at present). Mean adherence was 99.5% (95.5-100.0). During the treatment period, community pharmacists identified 16 ADE cases. 36 pharmacist’s recommendations were accepted by physicians. To a satisfaction questionnaire, 16/16 responded the counseling as useful, and 13/15 viewed the telephone monitoring as helpful.

Conclusions: These results show that our new management model with concerted interventions enables the continuous management of safe and effective oral outpatient chemotherapy.