Impact of Oncology Pharmacist’s Counselling on Drug Compliance to Capecitabine
NG V(1), YIP EYT (1), TSANG JSC (1), CHAN KH (1), CHOI AYF (1), YIU TT (1), CHAN SK (1)
(1) Pharmacy Department, Princess Margaret Hospital

Keywords:
Pharmacist
Counselling
Drug compliance
Capecitabine

Introduction
Capecitabine has been widely used in the treatment of various malignancies, including colorectal cancer, breast cancer and gastric cancer. Compliance to oral chemotherapy is essential to optimize cancer treatment outcomes and to minimize the occurrence of adverse reactions. The complicated doses and administration schedules of capecitabine results in a barrier to patients’ drug compliance. Capecitabine requires administration within 30 minutes after meals, may include multiple tablet strengths and most regimens adopt a 2-week on, 1-week off treatment cycle. Thus drug education by oncology pharmacists plays an important role in enhancing patients’ drug compliance.

Objectives
To evaluate the impact of oncology pharmacist service on patients’ drug compliance to capecitabine therapy.

Methodology
At Princess Margaret Hospital, patients started on capecitabine-based chemotherapy are referred to the oncology pharmacist clinic for medication counselling and are reviewed for drug compliance in subsequent cycles. This is a retrospective observational analysis of patients prescribed with capecitabine-based chemotherapy from 1st September to 30th September 2015 via Clinical Data Analysis and Reporting System (CDARS). Retrospective analysis was conducted in December 2015. Data in the Electronic Patient Record (ePR) system were accessed to determine drug compliance including the correct number of tablets administered, administration time, and any reported missing doses.

Result
In September 2015, 222 patients received capecitabine-based chemotherapy at Princess Margaret Hospital and had received pharmacist’s counselling on their first cycles. Forty-seven patients were excluded from the study due to lost to follow up
(n=15), treatment discontinuation (n=15), treatment completion (n=9), change of regimen (n=5), or death (n=3) at the time of analysis. Drug compliance to capecitabine was assessed through in-person or telephone consultation on subsequent cycles. The overall compliance rate, as defined by taking both the correct dosage at the correct time, without any missed doses, was 94.3% (n=165). Respective compliance rate to the prescribed dosage was 96.6% (n=169) and administration time was 96.0% (n=168). The non-compliance cases included missed doses (1.7%, n=3), wrong number of tablets administered (1.7%, n=3), and incorrect administration time (4.0%, n=7). Majority of patients showed a good understanding of capecitabine treatment demonstrated by the high rate of compliance as a result of pharmacist’s counselling. Drug education by oncology pharmacists can play a vital role in ensuring safe and effective use of complicated oral chemotherapy agents.