Usefulness of pharmacist–urologist collaborative management for patients with renal cell carcinoma receiving pazopanib monotherapy

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Introduction: Pazopanib is one of recommended treatment for metastatic renal cell carcinoma (RCC). Despite its effectiveness, patients often difficult to continue pazopanib treatment due to adverse events (AEs). To maximize patient care, we developed an ambulatory care pharmacy practice that enables collaboration between pharmacist and physician to manage patients with cancer receiving oral anti-cancer medications. In this study, we investigated the efficacy of this collaborative management in pazopanib monotherapy for metastatic RCC.
Method: We retrospectively reviewed the medical records of 51 consecutive patients with metastatic RCC receiving pazopanib at the Kobe City Medical Center General Hospital between April 2014 and December 2020. Our collaborative management for outpatients with urologic cancer was implemented in October 2016. Before being examined by urologists, patients visited the oncology pharmacy consultation room for a face-to-face consultation, wherein the oncology pharmacists assessed factors such as adherence to pazopanib, any AEs and their grades, and provided their suggestions to the urologists. The time to pazopanib discontinuation was compared between patients who started pazopanib before (n = 30) and after (n = 21) the implementation of the collaborative management. A multivariate Cox regression analysis was performed to analyze the factors associated with pazopanib discontinuation.
Results: In the collaborative management, the oncology pharmacists had a total of 245 face-to-face patient consultations (median 8 times), and provided 286 suggestions [according to supportive care in pazopanib treatment (214 suggestions) were most frequent, followed by pazopanib dose (43 suggestions), and laboratory test (23 suggestions)], and 236 (82.5%) were accepted by urologists. The median time to discontinuation (6.1 months vs 2.4 months, P = 0.024) was significantly longer in the after group. Multivariate analysis showed that collaborative management (hazard ratio [HR] 0.49, 95% confidence interval [CI] 0.26–0.88, P = 0.017), and ECOG PS ≥2 at pazopanib initiation (HR 3.87, 95% CI 1.47–9.13, P = 0.008) were significantly associated with pazopanib discontinuation.
Conclusions: We evaluated a pharmacist–urologist collaborative management program for outpatients with RCC receiving pazopanib monotherapy. The results revealed that collaborative management was useful for prolonging the time to pazopanib discontinuation.

Key words: pharmacist, collaborative management, ambulatory care, renal cell carcinoma, pazopanib