



## Gastrointestinal Bleeding Associated with Concurrent Capecitabine and Radiotherapy in Patients with Pancreatic Cancer

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### Abstract

**Introduction and aim:** Capecitabine is currently being evaluated for the treatment of a variety of gastrointestinal malignancies. The aim of this study is to report on the incidence of late gastrointestinal bleeding in patients with pancreatic cancer who received concurrent capecitabine and abdominal irradiation followed by prolonged capecitabine therapy.

**Materials and Methods :**We reviewed the medical records of 24 patients (13 female, 11 males; median age of 64.5 years): 22 cases of adenocarcinoma and 2 cases of neuroendocrine carcinoma. Initially, 4 patients underwent surgical resection. Median follow-up was 10.3 months. Patients received capecitabine (600-800 mg/m<sup>2</sup> orally twice daily) with concurrent radiation (50.4-54.0 Gy). Patients who were resected received an additional 2-4 cycles of capecitabine; otherwise, capecitabine was given indefinitely until disease progression occurred. Incidence of late gastrointestinal bleeding

**Results:** Three patients developed gastrointestinal bleeding after concurrent capecitabine and irradiation and 2 of these patients died as a result of this toxicity.

**Conclusions:** Our study indicates that serious gastrointestinal bleeding is a possible late complication associated with concurrent capecitabine and irradiation therapy for pancreatic cancer followed by additional capecitabine therapy. Caution and close monitoring should therefore be used when continuing capecitabine therapy in this setting.

**Keywords:** Deoxycytidine; Dihydrouracil Dehydrogenase (NADP); Drug Toxicity; Fluorouracil; Gastrointestinal Hemorrhage; Pancreatic Neoplasms; Radiotherapy; Thymidine Phosphorylase