

Therapy-related acute myeloid leukemia after concurrent chemoradiotherapy for esophageal cancer: report of two cases

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ABSTRACT

Concurrent chemoradiotherapy (CCRT) has become an important part of esophageal cancer treatment. Its efficacy has been proved and its acute adverse effects are well understood. Leukemogenesis is a potential late complication of ionizing irradiation and chemotherapy. Therapy-related acute myeloid leukemia (AML), however, has been rarely reported in esophageal cancer patients receiving CCRT. We here report two such cases. One patient received neoadjuvant CCRT and developed AML with a complex chromosome aberration 55 months after exposure to radiation- and cisplatin-based chemotherapy. The other had AML with t(8;21) twenty months following CCRT as definitive therapy. Such a severe complication of CCRT is a serious concern in esophageal cancer treatment. In the wake of the prolonged survival of some esophageal cancer patients, the treatment intensity may need to be reconsidered according to such experience.

Key words: therapy-related leukemia, concurrent chemoradiotherapy, esophageal cancer.

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