

The treatment outcome of definitive chemoradiotherapy in patients with esophageal squamous cell carcinoma

Seilianian Toosi M (MD)
*Department of Radiation Oncology
Mashhad University of Medical Sciences*

Aledavood SA (MD)
*Department of Radiation Oncology
Mashhad University of Medical Sciences*

Anvari K (MD)
*Department of Radiation Oncology
Mashhad University of Medical Sciences*

Nowferesti Gh (MD)
*Department of Radiation Oncology
Mashhad University of Medical Sciences*

Mohtashami S (MD)
*General Physician
Omid Hospital, Mashhad*

Corresponding Author:
Aledavood SA (MD)

E-mail:
saaledavood@yahoo.com

Abstract

Background & Objective: Surgery and /or radiotherapy are major local treatments for esophageal carcinoma. The results of radiotherapy alone have been unsatisfactory. The purpose of this study was to evaluate the treatment outcome of definitive chemoradiotherapy for patients with esophageal SCC.

Materials & Methods: This prospective histological descriptive study was done on 190 nonmetastatic esophageal SCC patients which received definitive chemoradiotherapy (55-64 Gy, Cisplatin 80-100 mg/m² day 1-5FU 750-1000 mg/m², 24h infusion days 1-4) with curative intent in cancer research center, Mashhad University of Medical Sciences between Jan 2000-Jan 2004. At least one course of chemotherapy was prescribed concurrently with radiotherapy.

Results: There were 99 male and 91 female patients with the median age of 65 (range, 25-87). The median radiation dose prescribed was 60 Gy (range, 55-64) and median chemotherapy courses was 4 (range, 1-8). With a median follow-up time of 12 months (range, 3-60), one, two and three-year survival rates were 67.8%, 48.7% and 36.3% respectively and median survival was 22 months. Reduction of symptoms was shown in 84% of patients with dysphagia. 109 patients remained disease free with a median follow-up of 14 months (range, 3-60), among which 34 were followed more than 24 months. We found 81 cases (42.6%) with treatment failure during the follow-up (34 locoregional failure, 14 distant metastases, 33 distant metastases accompanied with locoreginal failure).

Conclusion: Although definitive chemoradiotherapy can result in long term disease free survival and even cure in a subset of patients with SCC of esophagus, locoregional failure and distant metastasis has remained the main causes of treatment failure.

Key Words: Esophageal carcinoma, Chemotherapy, Radiotherapy, Concurrent chemoradiotherapy