Concomitant chemo-radiotherapy for unresectable oesophageal cancer: A mono-institutional study on 40 patients

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Abstract

Background/Aim

To analyse clinical response, overall (OS) and disease free survival (DFS) and toxicity in patients with unresectable oesophageal cancer treated by concomitant chemo-radiotherapy (CRT).

Materials and methods

Forty patients with stage IIa–IVa biopsy proven oesophageal carcinoma were treated with CRT. All patients were studied with endoscopy and CT and judged unresectable after multidisciplinary discussion. CRT consisted of 3 cycles of cisplatin 100 mg/m\(^2\) or carboplatin 300 mg/m\(^2\) on day 1 and 5-fluorouracil 1000 mg/m\(^2\) as a continuous infusion of 96 h associated with concurrent 3D-conformal RT. By using 15 MeV X-rays, a total dose of 60–66 Gy was delivered with daily fractions of 1.8–2.0 Gy.

Results

Complete response (CR), partial response (PR) and no response (NR) were observed in 50%, 20% and 20% of cases, respectively. Of the 20 patients with CR, 15 developed loco-regional recurrent disease. OS and DFS rates at 3 and 5 years were 38%, 8%, 49% and 10%, respectively. Total radiation dose \(\geq 60\) Gy improved loco-regional control and complete response (CR vs. PR + NR; \(p = 0.004\)) influenced both DFS and loco-regional control. Grade 3 gastrointestinal and haematological acute toxicity occurred in 3/40 patients (7.5%). One patient developed grade 4 renal failure. Late toxicity was reported in 2/40 patients (5.0%), consisting of grade 3 radiation pneumonitis.

Conclusions

Concomitant CRT for unresectable oesophageal cancer can result in an acceptable loco-regional control with limited toxicity. Response after treatment and total radiation dose influenced the outcome.

Keywords
Oesophageal cancer; Radiotherapy; Chemotherapy