

Review Article: A Review on Tumour Regression Grading (TRG) in Relation to the PFS and OS in Gastroesophageal Carcinoma. Retrospective Analysis in ELHT

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Abstract

Tumour Regression Grading (TRG) in relation to the PFS and OS in gastroesophageal carcinoma. Retrospective analysis in ELHT. Dr Ahmed Salah Ali Medical Oncology Consultant East Lancashire Hospital Trust Dr Ahmed Soliman Gen Surg Medical Staff East Lancashire Hospital Trust Abstract Background It is often difficult to counsel oncology patients after recovery from major surgery for gastroesophageal adenocarcinoma. Despite having clear recommendations indicating the effectiveness of perioperative chemotherapy (FLOT) for 4 cycles before to surgery followed by additional 4 cycles after surgery (1), the usefulness of post surgical chemotherapy alone is still not well established (2). Design of the study; We collected data from our medical oncology charts in ELHT; 61 patients received adjuvant chemotherapy FLOT after surgical management for gastroesophageal adenocarcinoma during the last four years; post-operative pathology reports re-viewed included TRG score and radiology review; Overall survival and progression-free survival (PFS) were computed. Results; In the groups with TRG scores of 1, 2, and 3, there was no mortality; however, in the groups with TRG scores of 4 and 5, there was 14% mortality. In the group with an un-known TRG score, the death rate was 28%. In the first group, the average time to advancement is 30 months, whereas it is 20 months in the second group and 11 months if the TRG score is unknown. Discussion; Although a small sample of patients was examined for a short length of time, this re-search showed that we may base our choice on the TRG score, or that it will at least assist us in determining a strategy for the future following surgery. A design for a randomised clinical trial may be useful for determining the need of adjuvant chemotherapy in the treatment of gastric and oesophageal cancer.

Keywords: TRG; Gastroesophageal carcinoma; FLOT

Introduction

It is often difficult to counsel oncology patients after recovery from major surgery for gastroesophageal adenocarcinoma.

Despite having clear recommendations indicating the effectiveness of perioperative chemotherapy (FLOT) for 4 cycles before to surgery followed by additional 4 cycles after surgery [1], the usefulness of post-surgical chemotherapy alone is still not well established [2].

Design of the study:

We collected data from our medical oncology charts in ELHT; 61 patients received adjuvant chemotherapy FLOT after surgical management for gastroesophageal adenocarcinoma during the last four years; post-operative pathology reports reviewed included TRG score and radiology review; Overall survival and progression-free survival (PFS) were computed.

Results;

In the groups with TRG scores of 1, 2, and 3, there was no mortality; however, in the groups with TRG scores of 4 and 5, there was 14% mortality. In the group with an unknown TRG score, the death rate was 28% (Figure 1)

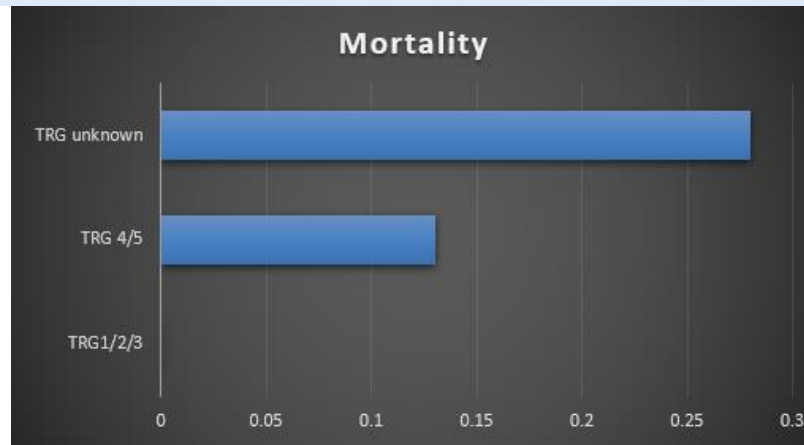


Figure 1. Shows the Mortality rate

In our analysis, we found that the progression rate is higher in the second group (TRG 4/5) than the first group (TRG 1/2/3) as shown in (Figure 2). In the first group, the average time to advancement is 30 months, whereas it is 20 months in the second group and 11 months if the TRG score is unknown (Figure 3)

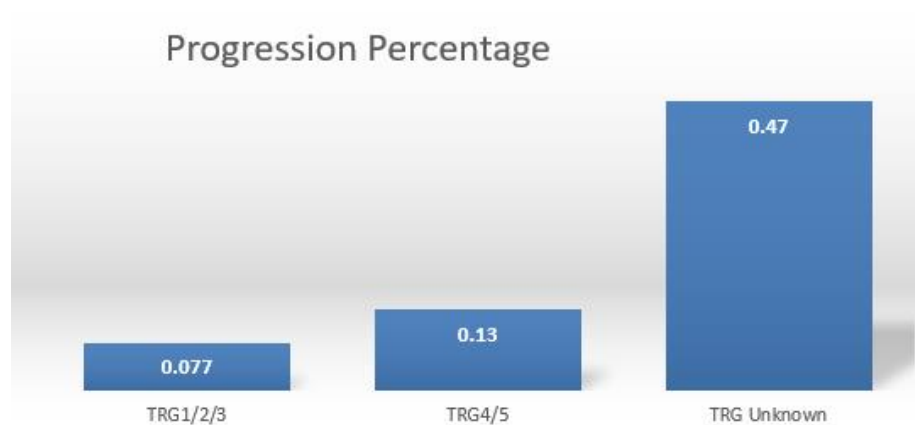


Figure 2. Shows the Progression Percentage

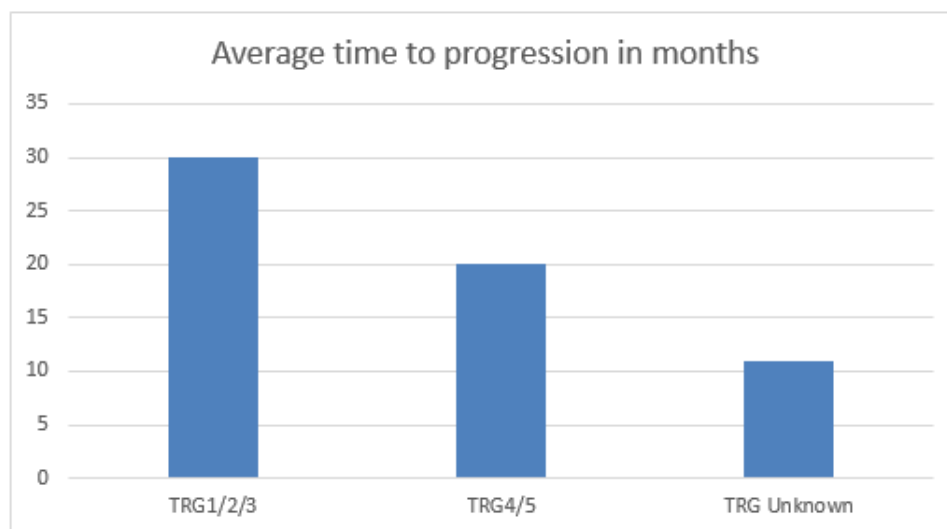


Figure 3. Shows the Average time to progression in months

Discussion:

Although a small sample of patients was examined for a short length of time, this research showed that we may base our choice on the TRG score, or that it will at least assist us in determining a strategy for the future following surgery.

A design for a randomised clinical trial may be useful for determining the need of adjuvant chemotherapy in the treatment of gastric and oesophageal cancer.

Tumour regression grade (TRG) is a descriptive measurement defined as a histological response to neoadjuvant therapy and has shown prognostic value for digestive system tumours [3,4].

Usually, we do not build our plan for adjuvant chemotherapy in Gastroesophageal adenocarcinoma (T2N0 and above) based on TRG score, however delivering the post operative data to the patient and discussing the plan of management, risk of disease recurrence and prognosis is very challenging especially with high TRG score (more than 3) with or without positive margins.

Further larger studies are strongly recommended to evaluate the exact benefits of adjuvant chemotherapy solely after the neoadjuvant chemotherapy, especially with high TRG scores which carry higher risk of disease progression in a shorter period of time.

Positive margins (R1) are a considerable addition to the poor prognosis as well.

Finally, clear and open discussion with patients about the post operative data including the TRG, margins and histopathology grade is the way to reach a strategy for addition of adjuvant chemotherapy or not, however lack of solid

date about the exact benefit makes it very challenging, so the patients' decisions are very considerable, especially with high risk features; high TRG, positive margins and poor performance status, as the benefits of pre surgical chemotherapy may not clear with high TRG, and the borderline performance status may be another factor behind a decision to stop treatment after the surgery.

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