TREATMENT OUTCOMES FOR BARRETT’S OESOPHAGUS RELATED NEOPLASIA HAVE IMPROVED OVER TIME WITH CHANGES IN ENDOSCOPIC PRACTICE: FIVE YEAR EXPERIENCE FROM THE FIRST FIVE HUNDRED PATIENTS IN THE UNITED KINGDOM REGISTRY

Introduction

Barrett’s oesophagus (BE) is the recognised pre-cursor to oesophageal adenocarcinoma (OAC). Combined endotherapy with endoscopic mucosal resection (EMR) and Radiofrequency ablation (RFA) have emerged as alternatives to surgery for curative treatment of patients with BE related neoplasia over the past 5 years.

Methods

We examine prospective data from United Kingdom (UK) registry of patients undergoing RFA/EMR for BE related neoplasia over the past 5 years. We aim to establish the frequency and time of recurrences after successful treatment. Before RFA, visible lesions were removed by EMR. Thereafter patients underwent RFA every 3 months. Biopsies were taken at 12 months for clearance of dysplasia (CR-D) and BE (CR-IM) at 12 months were assessed over two time periods, between 2008–2010 and from 2011–2013. In addition durability of successful treatment, progression to invasive OAC and changes in endoscopic practices were also analysed between the time periods. Before RFA, visible lesions were removed by EMR. Thereafter patients underwent RFA every 3 monthly and biopsies were taken at 12 months. New lesions appearing during RFA treatment were removed by rescue EMR. This treatment algorithm has remained unchanged over past 5 years.

Results

We report on 510 patients who have completed treatment with 12 month histology over past 5 years. CR-D and CR-IM have improved significantly between the former and later time periods from 77% and 56% to 91% and 82% respectively (p < 0.0001). The use of EMR for visible lesions prior to initiating RFA has also increased from 48% to 60% (p = 0.013). Conversely need for rescue EMR has decreased significantly to 3% over the last two and half years compared to 13% during initial time period (p < 0.0001). Progression to invasive OAC is not significantly different (2.8% in 2011–2013 vs. 4% 2008–2010, p = 0.56).

Conclusion

We report one of the largest series of patients undergoing RFA for BE neoplasia. Clinical outcomes have improved significantly over the past 5 years as endoscopists have more experience with improved lesion recognition, and more attention to resection of all visible lesions before RFA. As a result the requirement for rescue EMR during RFA has reduced. Although rate of progression to OAC is lower in the later part of the registry experience, this is not statistically significant and implies that despite advances in endoscopic imaging and technique the rate of progression remains in the region of 2–4% in these high risk patients. All collaborators of the UK RFA registry are acknowledged for their contributions to this work.

Disclosure of Interest

None Declared.

INTRODUCTION

Radiofrequency ablation (RFA) for patients with Barrett’s oesophagus (BE) related mucosal neoplasia has been shown to be safe and effective. Endoscopic mucosal resection (EMR) for visible lesions followed by RFA is now recommended practice for these patients. Although success rates are high for disease reversal at 12 months it is appreciated that recurrence after eradication of dysplasia and intestinal metaplasia (IM) can occur in up to 25% of patients. There is still debate as to what are the optimum endoscopic follow up intervals after successful treatment.

Methods

We examine prospective data from United Kingdom (UK) registry of patients undergoing RFA/EMR for BE related neoplasia over the past 5 years. We aim to establish the frequency and time of recurrences after successful treatment. Before RFA, visible lesions were removed by EMR. Thereafter patients underwent RFA every 3 months. Biopsies were taken at 12 months for clearance of dysplasia and BE. CR-IM were assessed over two time periods, between 2008–2010 and from 2011–2013. In addition durability of successful treatment, progression to invasive OAC and changes in endoscopic practices were also analysed between the time periods. Before RFA, visible lesions were removed by EMR. Thereafter patients underwent RFA every 3 monthly and biopsies were taken at 12 months. New lesions appearing during RFA treatment were removed by rescue EMR. This treatment algorithm has remained unchanged over past 5 years.

Results

A total 508 patients have been treated. At 12 months CR-D was 85% (428/508) and CR-IM 70% (354/508). For those with successful outcomes at 12 months who remain in follow up, median time to their most recent biopsy was 20 months from start of treatment (range 2–72). Kaplan Meier survival statistics predict that at 5 years 75% of patients are likely to be free of dysplasia and 74% free of IM. Median time to recurrence for dysplasia is 380 days (IQR 177–619), and IM 573 days (IQR 237–816). There were 21 patients with recurrent dysplasia, 48% occurred within the first year after successful treatment, 29% in