Despite confidence in the regimen, the long-term sustainability of CEIM has not been well-described, nor has the ideal number of RFA sessions and frequency and length of surveillance. This study used the RIBBON database in Ireland to analyze these factors.

Analysis was performed on 398 eligible patients who underwent at least one session of RFA to treat BE from 2009 to 2021 in major centres across Ireland. Patients included had a minimum of 12 months follow-up (FU), with a total 1433.76 patient-years of FU analysed. CEIM was defined as histological and endoscopic absence of BE at post-RFA FU.

Patient outcomes were categorised according to recurrence status at FU: sustained CEIM, primary recurrence, treatment failure and unknown outcomes. They were also grouped according to the extent of dysplasia using the Vienna Grading System.

Of the 398 patients, 78.14% were male, the mean age at diagnosis was 61.55 years, mean length of Barrett’s segment was 5.36cm, and baseline dysplasia was 19.3% intramucosal carcinoma (IMC), 19% high-grade dysplasia (HGD), 23.3% low-grade dysplasia (LGD) and 37.1% non-dysplastic BE (NBDE). Of these patients, 321 (80.65%) achieved CEIM, at similar proportions Of those, 67 (20.87%) experienced recurrence over 404.97 patient-years of FU. Further recurrence following subsequent treatment was rare (6 cases). The most common type of recurrence was NBDE (95.64%), and dysplastic recurrence was uncommon (4.36%). The mean time to recurrence was 647.21 days.

The results of this study showed that CEIM was achieved by RFA in the majority of cases, with dysplastic recurrence occurring at a very low rate, equating to significantly reduced disease progression.

There was a significant difference between the mean number of treatments for those who achieved sustained CEIM (4.15) and those who experienced recurrence (3.29). It is clear that some adjustments to the existing treatment and surveillance regimen could result in improvements in outcome.

534. CHERMOGRAPHY FOR ESOPHAGEAL CANCER: DO WOMEN RESPOND BETTER THAN MEN?

Maan Abdulrahman1, Rand Abdulrahman1, Nitya Kumar1, Martin Corhally1,2, Thomas Walsh1,3

1. Royal College Of Surgeons In Ireland - Bahrain, 2. Connolly Hospital Blanchardstown, Ireland, 3. Beaumont Hospital, Ireland

The incidence of esophageal cancer is higher in men, with evidence that men present at a more advanced stage. Randomized trials of neoadjuvant treatments have hitherto not stratified for gender, but it is unclear whether men present at a more advanced stage. Randomized trials of neoadjuvant chemoradiotherapy, neo-adjuvant chemoradiotherapy followed by surgery or surveillance, or surgery alone, between 1998 and 2019 at one teaching hospital mortalities underwent autopsy to determine the cause of death. Clinical, radiological and autopsy leaks were recorded.

There were 145 intra-thoracic esophago-gastric anastomoses created in 143 patients (2 patients required salvage re-resection for tumour recurrence); of which 77% were male, and 65.3% were for adenocarcinoma. Fifty-five percent were stapled and 45% were hand-sewn. There was only 1 confirmed leak during the study period and 1 patient died from a mediastinal haemorrhage, which at autopsy was considered to possibly be the result of sepsis as a result of an occult anastomastic leak.

The low anastomastic leak-rate is attributed to the protective effect of the load-bearing sutures; preventing any traction on the anastomosis, the most incessant source of which is the piston-like action of the diaphragm and the gripping of the diaphragmatic crura. It is intuitive that eliminating all possible tension on the anastomosis during the vulnerable healing phase, by employing tension-bearing sutures between conduit and pleura, would provide the greatest opportunity for success. This study evaluated such a strategy.

A prospectively maintained database of all esophagectomies performed over a 21-year period, was interrogated for the anastomotic leak rate following the introduction of a tension-elimination anastomotic technique. This consisted of securing the gastric conduit to the mediastinal pleura using load-bearing sutures inserted obliquely. When these were secured, the anastomosis became floppy, and remaining so throughout the vulnerable phase of healing, when collagenase digestion reduces anastomotic tensile strength by two-thirds. All patients had a contrast study performed between day 5 to 7 and all intra-hospital mortalities underwent autopsy to determine the cause of death. Clinical, radiological and autopsy leaks were recorded.

In 2020, the incidence of esophageal cancer was 8th and mortality was 6th in the world. However, it’s not the top 10 in Mexico. Mexico is a developing country and has no national cancer registration. Moreover, Mexico is the leading cause of death in the world.