Mean age was similar in both groups (60.4±5.9 yrs). 46.7% were of squamous cell carcinoma in the OE group vs 76.9% of adenocarcinoma in the MIE group. Ivor-Lewis approach was more common in the OE group (53.5% vs 38.5%). MIE was associated with shorter mean operative time (489±38 mins vs 52 mins). less blood loss (110ml vs 250ml), shorter length of stay post-op (10.38 days vs 24.67 days) and higher number of lymph node yield (44 vs 31.67). Post-op morbidity was lower in MIE (30.7% vs 73.3%) with Clavien-dindo grade-III and above complication rate of 7.69% vs 26.67%. 90-day mortality was 0 in the MIE vs 1 in the OE group.

MIE was associated with shorter operative time, higher number of lymph node yield, reduced post-op morbidity, mortality and shorter post-operative hospital stay in patients with esophageal cancer. The encouraging results marked the paradigm shift from OE to MIE in our center.

566. PROGNOSTIC SIGNIFICANCE OF TUMOUR BURDEN AND OPERATIVE TECHNIQUE FOR METACHRONOUS PULMONARY METASTASIS FROM ESOPHAGEAL CANCER: A SYSTEMATIC REVIEW AND META-ANALYSIS

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Disease recurrence following treatment for esophageal cancer (EC) remains common despite incremental gains from neoadjuvant chemotherapy. The lung is a common site of distant metastasis following definitive EC treatment. Tumour burden influences the surgical approach utilised in the treatment of pulmonary metastasis from EC. In turn, this impacts patient prognosis. This systematic review sought to identify the impact of tumour burden and surgical approach on 5-year survival following metastectomy of metachronous pulmonary metastasis from EC.

A search of the major reference databases (PubMed, Medline, Cochrane) was performed with no time limits up to March 2022. Results were screened in line with the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines. Studies reporting on the number of metastatic pulmonary tumours and operative techniques utilised were included. A random effects meta-analysis model was used to compare the impact of number of metastatic pulmonary deposits (single vs multiple) and operative approach (wedge vs anatomical resection) on the 5-year survival of patients following metastectomy for metachronous pulmonary metastasis from EC.

Seven non-randomised studies comprising 142 patients undergoing pulmonary metastectomy for metastatic EC were included. The number of metastatic deposits (single vs multiple) did not affect 5-year survival (Risk Ratio = 1.08; 95% confidence interval 0.58-2.02; p = 0.81). With respect to surgical technique, anatomical resection did not confer a survival benefit compared to wedge resection of pulmonary metastases from EC (Risk Ratio = 1.33; 95% Confidence Interval: 0.81 - 2.19; p = 0.26).

Tumour burden and surgical technique utilised does not impact upon the prognosis of patients undergoing pulmonary metastectomy for metastatic EC. However, current evidence from smaller non-randomised studies remains weak owing to variation in the clinicopathological features of the primary EC and pulmonary metastasis, limiting outcome assessment.

567. MDT OPTIMIZATION FOR DIAGNOSTIC WORKUP OF ESOPHAGEAL CANCER

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Rapid and complete workup of esophageal cancer is vital for a timely and individual treatment strategy. The aim of this study is to uncover potential inefficiencies and non-contributing investigations in the diagnostic process. This retrospective cohort study included all esophageal cancer patients referred to or diagnosed in the Amsterdam UMC or Karolinska Institutet between July 2020 and July 2021. Radiology, pathological assessment and MDT meeting reports were reviewed. To assess time interval from diagnosis to treatment, information on date of diagnosis, admittance to referral hospital, MDT and start treatment was collected.

This study included 252 esophageal cancer patients, 187 were treated with curative intent. Curative patients had a median age of 68, were predominantly male (74.9%) with adenocarcinoma (71.4%). Patients had a median of 34 days (IQR:27-43) between diagnosis and start treatment and a median time to referral of 6 days (IQR:0-11). Main denominators for prolonged time between diagnosis and treatment was need for additional diagnostics (45.5%) and local protocol (Amsterdam UMC 39 days vs Karolinska 27 days). However, for 33 out of 77 patients (42.9%), no other than logistical reasons could be found.

Differences in time between diagnosis and treatment in the centers could be explained by variations in workup protocol, MDT regulations and the need for additional diagnostics.

568. THE PROGNOSTIC EFFECT OF PATHOLOGICAL LYMPH NODE REGRESSION AFTER NEOADJUVANT CHEMOTHERAPY FOR OESOPHAGEAL ADENOCARCINOMA – A MULTICENTRE STUDY

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The prognostic benefit of primary tumour and lymph node (LN) downstaging after neoadjuvant chemotherapy for oesophageal adenocarcinoma (OAC) is well described. However, there is no robust evidence regarding the prognostic effect of pathological LN regression despite emerging evidence of a discrepancy, in some patients, between tumour regression grade in the primary tumour and response in regional LNs. The aim of this study was to investigate the relationship between pathological LN regression, tumour recurrence and survival.

Retrospective, multicentre cohort study including 763 patients with OAC treated with neoadjuvant chemotherapy followed by surgery at 5 high-volume tertiary referral centres in the United Kingdom. Tumour regression was assessed in the primary tumour (Mandard) and LNs retrieved from oesophagectomy specimens. Patients were classified as LN negative (no evidence of tumour or regression in any LN), complete LN-responders (evidence of regression ≥ 1 LN, no residual tumour in any LN), partial LN-responders (evidence of regression ≥ 1 LN with residual tumour ≥ 1 LN) and LN non-responders (no or minimal regression in any LN). Survival analysis was performed using Kaplan-Meier and Cox regression.

Overall, 243 (31.8%) patients were classified as LN negative, 62 (8.1%) as complete LN-responders, 155 (20.3%) as partial LN-responders and 303 (39.7%) as LN non-responders. Some patients had a LN response in the absence of a response in the primary tumour (97/431, 22.5%). Multivariable Cox regression survival analysis (adjusting for age, gender, chemotherapy regimen, clinical stage, tumour grade, lympho-vascular invasion and primary tumour response) demonstrated improved overall survival in complete LN-responders (Hazard ratio (HR) 0.37 95% confidence interval (CI) 0.24-0.58), partial LN-responders (HR 0.70 95% CI 0.55-0.89) and LN negative patients (HR 0.34 95% CI 0.26-0.44) compared to LN non-responders.

In this cohort of patients with OAC treated with neoadjuvant chemotherapy prior to surgical resection, LN regression was a strong prognostic factor independent of primary tumour response, which was discordant in a significant number of patients. Complete LN-responders had equivalent survival to those with negative LN. Complete and partial LN-responders had better survival than LN non-responders. Evaluation and documentation of LN regression should be considered during the standard pathological reporting of oesophagectomy specimens.

569. INCIDENCE AND ONCOLOGICAL IMPLICATIONS OF THYROID INCIDENTALOMAS IN ESOPHAGEAL CANCER PATIENTS

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Although thyroid incidentalomas are regularly encountered during imaging of esophageal cancer, their oncological significance remains unknown. The aim of this study was to describe the incidence and etiology of thyroid incidentalomas observed during the diagnostic workup of esophageal cancer patients.

This retrospective cohort study included all esophageal cancer patients referred to or diagnosed in the Amsterdam UMC between January 2012 and December 2016. Radiology and multidisciplinary team meeting reports were reviewed for thyroid incidentalomas. In case of thyroid incidentaloma, the 18FDG-PET/CT or CT was reassessed by a radiologist blinded for the original report. The primary outcome was the incidence and etiology of thyroid incidentalomas.

This study included 1,110 esophageal cancer patients, with a median age of 66 years. Most patients were male (77.2%) and had an adenocarcinoma (69.4%). Thyroid incidentalomas were reported in 115 patients (10.4%). In 23 (20.0%) patients, additional diagnostics were required to characterize the lesion and two thyroidal lesions proved malignant. One patient was diagnosed with an esophageal cancer metastasis and one patient with a primary thyroid carcinoma. Only the primary thyroid carcinoma resulted in treatment alteration. The other malignant thyroid incidentaloma was in the context of generalized disseminated esophageal disease and no longer eligible for curative treatment.

In this study, thyroid incidentalomas were regularly observed, although their oncological significance is limited. Therefore, further etiological examination of thyroidal incidentaloma should only be considered when clinical consequences are to be expected.

570. INCIDENCE AND ONCOLOGICAL IMPLICATION OF ADRENAL INCIDENTALOMAS IN ESOPHAGEAL CANCER PATIENTS

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Adrenal incidentalomas are regularly encountered during imaging of esophageal cancer patients, but their oncological significance remains unknown. This study aimed to describe the incidence and etiology of adrenal incidentalomas observed during the diagnostic workup for esophageal cancer.

This retrospective cohort study included all esophageal cancer patients referred to or diagnosed in the Amsterdam UMC between January 2012 and December 2016. Radiology and multidisciplinary team meeting reports were reviewed for adrenal incidentalomas. In case of adrenal incidentaloma, the 18FDG-PET/CT was reassessed by a radiologist blinded for the original report. In case of a metachronous incidentaloma during follow-up, visibility on previous imaging was reassessed. Primary outcome was the incidence, etiology and oncological consequence of synchronous adrenal incidentalomas.

This study included 1,164 esophageal cancer patients, with a median age of 66 years. Patients were predominantly male (76.1%) and most had an adenocarcinoma (69.0%). Adrenal incidentalomas were documented in 138 patients (11.9%) during the diagnostic workup. At primary esophageal cancer workup, 22 incidentalomas proved malignant. However, follow-up showed seven malignant incidentalomas missed or inaccurately diagnosed as benign. In total, stage migration occurred in 15 of 22 (68.2%), but this number would have been higher if no incidentalomas were missed or inaccurately diagnosed.

The oncological impact of adrenal incidentalomas in patients with esophageal cancer is significant as a considerable part of incidentalomas changed treatment intent from curative to palliative. As stage migration is likely, pathological examination of a synchronous adrenal incidentaloma should be considered.

571. ESOPHAGEAL PERFORATION AFTER LOBECTOMY: PADLOCK CLIP TO THE RESCUE

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