

## AB056. SOH23ABS\_126. Physical activity and frailty as part of health related quality of life assessment in oesophageal cancer survivors following oesophagectomy

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**Background:** Survival rates for patients with oesophageal cancer are improving resulting in an increasing population of oesophageal cancer survivors. Surgery is the mainstay of treatment which has a high risk of post-operative morbidity. This study aimed to characterise health related quality of life in oesophageal cancer survivors following curative oesophagectomy with a specific focus on physical activity and frailty assessment.

**Methods:** This was a cross-sectional cohort study of patients who underwent oesophageal cancer surgery between 2010 and 2015. A multicomponent questionnaire was distributed to disease-free patients at least one year post completion of treatment. Linear and logistic regression analyses were utilised to determine the impact of treatment and pathologic variables on physical activity and frailty.

**Results:** On multivariable analysis, age was a significant predictor of level of physical activity ( $P=0.001$ ). Male sex, critical care length of stay and eating symptoms were independent predictors of frailty in both the PRISMA7 and SARCF tools (all  $P<0.001$ ). Inpatient length of stay ( $P<0.001$ ) and persistent eating symptoms following treatment ( $P<0.001$ ) were both predictive of physical function following completion of treatment.

**Conclusions:** Curative oesophagectomy can have

significant effects on patients' physical function, levels of physical activity and risk of frailty. Current methods of assessing health related quality of life in oesophageal cancer survivorship may under-investigate the effects of curative oesophagectomy on physical activity and frailty. Further research is warranted to investigate how patient pathways can be enhanced to minimise the long-term health related quality of life (HR-QL) impact of curative treatment.

**Keywords:** Health related quality of life (HR-QL); frailty; oesophagectomy; oesophageal cancer survivorship; physical activity

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### Footnote

*Conflicts of Interest:* The authors have no conflicts of interest to declare.

*Ethical Statement:* The authors are accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

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