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72325 - Centralisation of gastric cancer surgery - impact on treatment strategies and survival - a national population-based cohort study

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Introduction: Centralised surgery care improves results of curative resection in rare malignancies. Less is known of secondary effects of such centralisation on all patients, including patients receiving palliative or no tumour treatment. This population-based cohort study aimed to evaluate effects of centralisation on survival and treatment decision in all gastric cancer patients in Sweden between 2006-2016.

Method: All patients diagnosed with non-cardia gastric cancer were identified using National Registry for Oesophageal and Gastric Cancer (NREV) in Sweden. Patients cared by a local hospital performing low-volume curative gastric cancer surgery before centralisation were compared to patients in the same communities after curative cases were referred elsewhere. Survival differences were plotted in logistic regression models.

Result: Of 49 hospitals, 28 stopped performing curative gastric cancer surgery during the study period. After centralisation, 8 hospitals remained performing curative gastric cancer surgery. 4562 patients were included, and the median overall survival increased from 7.9 to 9.2 months. Resection rates fell from 36% to 30%. Treatment recommendation made at multidisciplinary cancer conference increased from 36% to 87%, where active tumour treatment increased from 66% to 72%. No significant difference in treatment strategy or time to surgery was found between the groups. No difference in overall survival was found between the groups.

Discussion: During the centralisation of gastric cancer surgery, survival, multidisciplinary treatment decisions and active treatment increased, with no detrimental effects on populations outside the major centres’ primary uptake areas.
99m(Tc99m)+/-blue dye (BD). In a pilot study, we have shown that an ultra-low dose (0.1 mL) SPIO injected intradermally was feasible. This current study, MagSnow 2.0, aims to validate the ultra-low intradermal SPIO dose in a larger cohort. Preliminary data are presented.

Primary endpoint is SLN detection. Chi-square test was used to compare proportions and T-test for comparing number of SLNs. 2, tumor size 15 mm and predominantly invasive ductal cancers (80.2%), underwent breast conserving surgery (96.0%) or mastectomy. SLN detection with SPIO was 97.6% and with Tc99m+/-BD 98.4% (p = 0.65). The mean number of SLNs detected with SPIO was 1.66 (median 1, IQR 1-2) and Tc99m+/-BD 1.72 (median 2, IQR 1-2) (p = 0.60).

99m+/-BD for SLN detection. SPIO can be injected weeks before surgery and no nuclear medicine facilities are needed. Skin discoloration and magnetic resonance imaging artefacts are currently investigated in 50 patients from the pilot study.