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Background: For advanced gastric cancer (AGC), D2 gastrectomy is the standard treatment. However, a laparoscopic D2 gastrectomy(LG) is technically challenging surgery. Our previous report of COACT 1001 study, which is randomized phase II study to evaluate the feasibility of LG compared with open surgery(OG) for AGC, showing primary endpoint of non-compliance of lymph node dissection and three-year disease-free survival supported role of LG for AGC. Herein we report five-year overall and disease-free survival outcome of the study.

Methods: Patients with cT2-T4a and cN0-2 (AJCC 7th staging system) distal gastric cancer were randomly but not blindly assigned to LG or OG groups. Patients were followed up for recurrence and survival for 5 years.

Results: Between Jun 2010 and Oct 2011, 204 patients were enrolled and underwent either LADG (n = 105) or ODG (n = 99). Of those, 196 patients (100 in LADG and 96 in ODG) were included in the intention-to-treat analysis. There were no significant differences in the five-year overall survival between LG and OG groups (85.1% vs 84.1%, respectively; p = 0.749). In the subgroup analysis, five-year overall survival was not different in between the groups according to the clinical stage (stage I: 95.7% vs 95.5%; p = 0.988, stage II: 96.1% vs 84.6%; p = 0.057, stage III: 48.3% vs 74.1%; p = 0.156) and pathological stage (stage I: 97.5% vs 94.4%; p = 0.512, stage II: 100% vs 90.8%; p = 0.099, stage III: 48.7% vs 72.7%; p = 0.151, stage IV: 100% vs 0%; p = 0.18). Five-year disease-free survival also was not significantly different between two groups (74.5% vs 78.7%, respectively; p = 0.604). The trend of overall and disease-free survival was favorable for LG in stage II but OG in stage III.

Conclusions: LG was feasible for AGC based on the five-year overall and disease-free survival rate. Further research should be done in large scale for stage III gastric cancer.

Conflict of interest: No conflict of interest.

Scientific Symposium

Innovations and Areas for Development in the Surgical Management of Melanoma

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RISK STRATIFICATION OF SENTINEL NODE POSITIVE MELANOMA PATIENTS DEFINES SURGICAL MANAGEMENT AND ADJUVANT THERAPY TREATMENT CONSIDERATIONS

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Background: In light of the evolving landscape of adjuvant therapy in melanoma and the recently confirmed absent survival benefit of completion lymph node dissection (CLND), it becomes important to explore possible

consequences of omitting CLND, and whether it is possible to adequately stratify positive sentinel node (SN) patients solely based on information retrieved from the melanoma up to the sentinel lymph node biopsy (SLNB).

Methods: A retrospective cohort from nine European Organization for Research and Treatment of Cancer Melanoma Group centers was used. Patients were staged based on SLNB and CLND result according to the American Joint Committee on Cancer (AJCC) criteria and stratified by ulceration and SN tumour burden. These were incorporated in Cox regression models. Predictive ability was assessed using Harrell's concordance index (c-index) and the Akaike information criterion (AIC).

Results: In total, 1015 patients were eligible. CLND led to upstaging in N-category in 19% and in AJCC stage in 5-6%. The model incorporating only ulceration and SN tumour burden performed equally well as the model incorporating substages after CLND. The model incorporating substages based on SLNB had the lowest predictive ability. Stratifying by ulceration and SN tumour burden resulted in four positive SN groups from which low-, intermediate and high-risk prognostic classes could be derived.

Conclusions: Adequate stratification of positive SN patients was possible based on ulceration and SN tumour burden category. The identification of low-, intermediate- and high-risk patients could guide adjuvant therapy in clinical practice. Omitting CLND seems to have little consequences.

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Scientific Symposium

State of the art in Breast Reconstruction Surgery (SSM/ NSM/ Implants, Autologous, RT)

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PATIENT REPORTED OUTCOMES OF SATISFACTION WITH BILATERAL BREAST REDUCTION SURGERY FOR BREAST CANCER TREATMENT

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Background: Oncoplastic surgery for breast cancer has increased in popularity over the last few years, with the oncological safety confirmed in several studies. There is, however, limited published data on patient reported outcomes from this surgical approach. This study will look at patient reported outcomes on satisfaction following bilateral breast reduction surgery as part of breast cancer treatment.

Materials and Methods: The validated BREAST-Q breast reduction module was sent to all surviving patients who had had no documented cancer recurrence and had undergone bilateral breast reduction surgery as part of breast cancer treatment in Tayside between August 2013 and August 2017. Q-score was then used to analyse data and correlate this with patient and clinical information including age, specimen weights, BMI, diagnosis,

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mode of detection, wire localisation, axillary procedure, incision, nipple procedure, smoking status, and adjuvant treatment. Ethical approval was granted by University of Dundee.

Results: The patient response rate to the study was 61.3% (57 of 93 patients), with a mean age of 59 years (range 41–75 years). The average time since surgery was 24 months (range 7–51 months). The Q-score results for each domain in the BREAST-Q are shown in Table 1.

Throughout all domains it was found that with increasing patient age, there was increased patient satisfaction ($r=0.5$; $p=0.0005$). Other variables found to be associated with increased patient satisfaction were being identified through breast screening rather than a symptomatic presentation, diagnosis of DCIS rather than invasive disease, no axillary surgery, no chemotherapy and being a non-smoker.

Conclusions: Our results demonstrate that patient reports of body image have a significant influence on overall satisfaction following surgery, with appearance of the breast in relation to shape and symmetry being important factors. Younger patients were least satisfied with their body image, which reflects the need for better management of expectations in

Domain	Minimum Q-Score	Maximum Q-Score	Average Q-score
Satisfaction with breasts	42	100	75
Satisfaction with outcome	33	100	80
Psychosocial well-being	12	100	74
Sexual well-being	0	100	57
Physical well-being	45	100	74
Satisfaction with information	45	100	80
Satisfaction with nipples	25	100	77
Satisfaction following radiation	49	100	87

this patient population.

TABLE 1

Conflict of interest: No conflict of interest.

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A NOVEL STRATEGY FOR THE IMMEDIATE SALVAGE OF INFECTED BREAST IMPLANTS

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Background. Infection represents a significant cause of failure and patient anguish following skin-sparing mastectomy (SSM) with implant reconstruction. Conventionally, in order to facilitate safe re-implantation with an expander, infection necessitated ex-plantation and prolonged antibiotic administration, with sufficient duration to ensure cavity sterilisation. With this technique, skin retraction and scar formation frequently occur due to inflammation and oedema, which may perverse cosmesis. Furthermore, patients are typically left for a period of months without a breast mound, often to the detriment of body image.

We report our experiences of a novel technique for the immediate salvage of infected implant reconstructions following SSM. We describe a series of 14 patients managed using a vacuum-assisted closure device, combined with aggressive local and systemic antibiotic administration, with the aim to achieve cavity sterilisation within days, permitting single-stage re-implantation.

Materials and methods. Fourteen patients who had undergone SSM with implant/ADM reconstruction which had become infected or threatened with partial skin flap necrosis were managed via this novel technique. All patients displayed clinical signs of infection, in addition to a proven microbial infection confirmed via ultrasound-guided aspiration and microbiological culture. Following initial broad-spectrum antibiotics, subsequent therapy for local irrigation, as well as systemic administration, was guided by microbial sensitivities.

Results. After utilisation of this strategy, all but one patient received a new fixed-volume implant, without requiring a conventional two-stage expander approach. Of those, all have returned to regular follow-up and maintain excellent cosmesis, mirroring the pre-infection aesthetic outcome. One patient was unable to undergo immediate re-implantation under strict guidance from microbiology, due to growth of *mycobacterium fortuitum*.

Conclusions. Our novel technique allows for early re-implantation and restoration of the initial reconstruction, thus avoiding the consequences of a prolonged period without a prosthesis. We advocate this technique in cases of implant infection refractory to conservative management.

Conflict of interest: No conflict of interest.

Scientific Symposium

Sarcoma, incl. Retroperitoneal

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FEASIBILITY OF SURGICAL SALVAGE COMBINED WITH INTRAOPERATIVE RADIATION THERAPY (IORT) FOR RECURRENT SOFT TISSUE SARCOMA AFTER MULTIMODALITY TREATMENT

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Background: The management of local recurrences of soft tissue sarcomas (STS), after previous multimodality approach containing radiotherapy, is challenging. The aim of this study is to evaluate safety, feasibility and efficacy of surgical salvage combined with intraoperative radiation therapy (IORT) alone in patients affected by locally recurrent STS of any site.

Materials and methods: We retrospectively analyzed data of patients with local recurrences of STS after failure of previous multimodality treatment, containing preoperative radiotherapy +/- chemotherapy and surgery plus IORT with electrons, treated at our Institute.

Results: Data of 43 patients, 19 (44%) female and 24 (56%) male, treated between March 2001 and March 2018, were available. Median ECOG PS was 0. Site of primary tumor was: limb in 13 (30%) patients, trunk in 10 (23%) patients and retroperitoneal sarcomas (RPS) in 20 (47%) patients. Complete tumor resection with microscopically clear margin (R0) was possible in 20 (46%) cases: 9 limb, 5 trunk and 6 retroperitoneal sarcoma. Twenty-one (49%) patients had microscopically residual disease (R1): 4 limb, 5 trunk and 12 retroperitoneal sarcoma. Macroscopically residual tumor (R2) was present in 2 (5%) patients with retroperitoneal sarcoma. Multivisceral resection of contiguous organs was performed in 10 (50%) cases with retroperitoneal sarcoma. IORT with electrons was administered at a median dose of 15 Gy (range 12.5–18.0) after tumor removal. Grade III complications were reported in 3 (7%) patients: 2 bleeding and one bowel obstruction; all of which required surgical treatment. Grade II complications were reported in 9 (21%) patients, most of which were late neuropathy. There were no postoperative deaths. At a median follow-up of 36 months (range 6–162) 17 (40%) patients are alive.

Conclusion: Surgical salvage combined with re-irradiation with full dose IORT, in selected patients, seems to be safety and feasible with acceptable morbidity. Considering this unfavorable patients population, the salvage treatment proposed shows interesting results, in terms of oncologic outcome.

Conflict of interest: No conflict of interest.

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ISOLATED LIMB PERFUSION FOR UNRESECTABLE EXTREMITY CUTANEOUS SQUAMOUS CELL CARCINOMA; AN EFFECTIVE LIMB SAVING STRATEGY

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