Conclusions: A gap has been identified in the training of modern surgical trainees providing a niche for the development of educational strategies to address open conversion. These strategies may be in the form of courses, surgical trainee teaching, online and video learning materials, post CCT training, fellowships and centralising uncommon cases.

Aim: We investigated the factors associated with variation in blood transfusion utilization following primary spinal fusion for idiopathic adolescent scoliosis (IAS) and its association with infectious complications.

Methods: Data was extracted from the Statewide Planning and Research Cooperative System (SPARCS), Using International Classification of Diseases (ICD-9), all patients included had a diagnosis of IAS and underwent spinal fusion from 2000 to 2013. Bivariate and mixed-effects logistic regression analyses were performed to assess the factors associated with receiving a perioperative allogenic red blood cell transfusion.

Results: Among 6,230 patients who underwent IAS surgery, 27.77% of patients received a perioperative blood transfusion. After controlling for patient, surgeon, and hospital-level factors, significant variation in transfusion rates was present across both surgeons and hospitals with a 13-fold difference observed in transfusion rates between the lowest and highest utilization for hospitals and a 4-fold difference observed for surgeons (p < 0.0001).

Conclusions: Significant variation in perioperative blood transfusion utilization exists at both the surgeon and hospital level. These findings are unexplained by patient-level factors and other known surgeon and hospital characteristics, suggesting that variation is due to provider preferences and/or lack of standardized transfusion protocols.

Aim: It has been proposed that anatomical variation of the common carotid artery (CCA) increases the incidence of hypoglossal nerve and superior thyroid artery (STA) injury when performing carotid endarterectomy and managing neck pathology. These potentially avoidable complications increase post-operative morbidity. We aimed to identify whether anatomical variation of the CCA bifurcation level alters its proximity to the hypoglossal nerve and the origin of the STA.

Methods: Bilateral neck dissection was performed on 24 embalmed human cadavers (18 male, 6 female). The level of the CCB was classified in relation to the anterior laryngeal structures.

Results: When the CCA bifurcation level was located more superiority, the hypoglossal nerve was located significantly closer to the bifurcation (p < 0.01) and the STA branched most frequently from the CCA (p < 0.05). The STA branched from the CCA in 67%, carotid bifurcation in 10% and external carotid artery in 23% of the specimens.

Conclusions: These results demonstrate that if a patient possesses a raised CCA bifurcation level surgeons should be aware that the hypoglossal nerve may be exposed and the STA is more likely to originate from the CCA. Knowledge of these anatomical variations is necessary to reduce unnecessary complications and retain a bloodless surgical field.

Conclusions: We have demonstrated that this patient group can be safely and efficaciously managed with neurosurgical debulking and aggressive adjuvant therapy.
multimodal adjuvant therapy. Complication rates were deemed acceptable considering the grade of glioma in question and comparable to those of a younger population (<70yrs).

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0275: THE EFFECTS OF CELL ASSISTED BREAST AUGMENTATION OR RECONSTRUCTION ON GRAFT VOLUME, COSMETIC OUTCOMES AND COMPLICATIONS IN FEMALES: A SYSTEMATIC REVIEW
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Aim: Cell-assisted lipotransfer serves as a novel technique for both breast reconstruction and breast augmentation. This systematic review aims to discuss current trends in surgical technique, operator and patient-reported outcomes and present an up-to-date clinical trial landscaping analysis.

Methods: Key electronic databases were searched according to PRISMA guidelines and pre-defined inclusion and exclusion criteria. Two independent reviewers examined the retrieved publications and performed data extraction.

Results: 3980 publications were identified. Following screening, 11 studies were included for full review, representing a total of 336 patients with a follow up time ranging from six to 42 months. Variation was noted in graft retention and reported satisfaction levels. Complications occurred at a rate of 37.25%.

Conclusions: Cell-assisted lipotransfer is a promising surgical technique for both plastic surgeons and patients globally. Further technical and outcome standardization is required, in addition to rigorous randomized controlled trials and long term follow up data to determine oncological risk.

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0029: THE ASSOCIATION BETWEEN THE ‘FAT MASS AND OBESITY ASSOCIATED GENE’ (FTO) AND OBESITY-LINKED EATING BEHAVIOURS IN ADULTS AND CHILDREN: A SYSTEMATIC REVIEW
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Obesity is rapidly becoming a condition of increasing concern among surgical specialties, due predominately to its association with significant intraoperative and postoperative complications. FTO has been recognised as one of the principle candidate genes predisposing to common obesity in humans and numerous weight-associated single nucleotide polymorphisms (SNP) of FTO have been identified. However, understanding of the mechanism of action by which FTO contributes to obesity is limited. The objective of this systematic review is to investigate the hypothesis that weight-associated variants of the FTO gene elicit their effect on adiposity by influencing eating behaviour. An exhaustive database search and screening process was conducted, following PRISMA guidelines, culminating in data extraction from 16 relevant studies. The effects of five FTO SNPs were assessed across these studies: rs9939609, rs1421085, rs17817449, rs1121980 and rs9939973. All five of the SNPs were significantly associated with increased adiposity in at least one study. The rs9939609 variant was significantly linked to multiple appetite behaviours in children with the potential to predispose to obesity, including: increased energy and fat intake, risky eating behaviour, decreased satiety responsiveness and preference for energy dense foods. The four remaining SNPs were not related to eating behaviour in either adults or children.

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0659: SKIN SPARING MASTECTOMY WITH IMMEDIATE NIPPLE RECONSTRUCTION DURING AUTLOGOUS LATISSIMUS DORSI BREAST RECONSTRUCTION: A REVIEW OF PATIENT SATISFACTION
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Introduction: Oncological resection for breast cancer can result in distressing chest wall deformities. Reconstructive surgery aims to restore normal shape and form following ablative surgery, but can involve multiple procedures. We aim to evaluate surgical, and patient-reported outcomes following mastectomy with immediate LD breast and nipple reconstruction.

Methods: Patients undergoing mastectomy with immediate breast and nipple reconstruction were included in the study. Clinical information was assessed. A validated, patient-reported outcome tool – The BREAST-Q – was administered to patients to assess the impact and effectiveness of this reconstructive strategy.

Results: Twenty-nine patients were included in the study. The majority of patients had in situ disease (51.7%) or invasive carcinoma (27.6%). 41.4% of patients had previous chest wall irradiation. The mean age at reconstruction was 48.0±1.8 years. The procedure was well tolerated, with seroma (27.6%) and capsular contracture (31.6%) being the most frequently encountered complications. Patients reported a high level of satisfaction with the overall physical appearance and psychological outcome following reconstruction (Q-scores of 74.3±5 and 77.7±3.2, respectively).

Conclusions: Nipple reconstruction should no longer be the final reconstructive procedure following breast cancer surgery. Immediate breast and nipple reconstruction is a well-tolerated procedure, with high levels of reported satisfaction amongst patients.

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1048: PREDICTING PAIN RELIEF AFTER VARIOUS FOOT AND ANKLE RECONSTRUCTIVE PROCEDURES – THE EFFICACY AND ROLE OF PERIPHERAL NERVE BLOCKS
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Aim: Several variables affect post-operative pain after reconstructive foot and ankle surgery. Recently, image-guided regional nerve blocks for managing post-operative pain have become established, gaining popularity in F&A surgery. However, evidence is still inconsistent. Traditionally, hindfoot procedures are deemed more painful than forefoot or midfoot surgery. This study addresses this question.

Method: 145 patients undergoing elective F&A surgery were prospectively studied, 70 received peripheral nerve blockade. Anaesthetics were recorded and procedures categorised. Pain was recorded immediately post-operatively, 6 and 24 hours post-operatively using the visual analog scale (VAS). Kruskal-Wallis test was used for non-parametric analysis and Pearson’s Chi-square test for categorical data.

Results: There was no difference in post-operative, 6hr or 24hr VAS between patients undergoing hindfoot surgery and those having forefoot/ midfoot surgery. Although patients undergoing nerve blocks had satisfactory initial pain relief, they experienced significantly more pain at 24hr than those not having a block (p=0.025). Overall, 94% patients were satisfied with their anaesthetic and would have it again.

Conclusions: This study shows that, contrary to popular belief, hindfoot surgery is not more painful than forefoot/midfoot surgery. Results showed that patients receiving nerve blocks probably had rebound pain at 24hr post-operatively. Further studies are needed to explore this relationship.

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0725: THE NOTTINGHAM HIP FRACTURE SCORE: CAN THIS BE A DISCHARGE PLANNING TOOL?

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