ent defects for reconstructive approaches using DCIA, fibula, scapula and composite RFFF.

Methods: All patients undergoing segmental resection of their mandible from 1992 to 2012 were included in the study. The size and position of the defect, reconstructive technique, flap survival, dental rehabilitation, length of admission and complication rates were compared. Reconstructive options in the previously irradiated neck, the medically compromised patient and after failure of the first choice reconstruction, were also examined.

Results: 413 patients were included (251 males and 162 females). The aetiology of the defects was: SCC 84% ($n = 347$), other tumours 8% ($n = 33$), osteoradionecrosis 7% ($n = 29$) and trauma 1% ($n = 3$). The median defect length was 75 mm (30–200 mm). The defects were reconstructed using, fibula 33% ($n = 134$), DCIA 28% ($n = 117$) composite radial 25% ($n = 104$) and scapula 14% ($n = 58$) free flaps.

Conclusions: When considering the most appropriate reconstruction, the performance status of the patient, aetiology, size and position, need for skin/mucosal reconstruction, dental rehabilitation, previously operated or irradiated neck and the technical expertise available, must be considered. A protocol for management of these defects based on 20 years experience of 413 cases will be presented.

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EMT markers in tongue squamous cell carcinoma

Alastair Michael Fry *, Philip Da Forno, Eugene Tulchinsky, Christopher Avery

University of Leicester, United Kingdom

Introduction: Epithelial mesenchymal transition (EMT) is a genetic program controlling cell migration during embryonic development and in wound healing. Aberrant activation of EMT programs occur in cells of epithelial tumours and contributes to the formation of cancer stem cells and metastasis.

A number of key markers for EMT have been identified including SLUG (SNAI2), TWIST, SIP1 and ZEB1, which play important roles in EMT. We aim to determine the degree of expression of these in tongue squamous cell carcinomas (SCC).

Method: Immunohistochemistry was performed using the NovoLink Polymer Detection System kit on 21 archived tongue SCC's to determine the degree of expression of SLUG, TWIST, SIP1 and ZEB1. The percentage of positively stained tumour cells out of the total number of tumour cells seen was recorded. Negative samples were defined as those with <5% positive cells.

Results: All of the tongue SCC's showed positive but variable SLUG expression with an average of 52% positivity (range 5–90%). Only 1 SCC was well differentiated and this had 29% positive cells. Moderately differentiated tumours ($n = 17$) averaged 51% positive cells. Poorly differentiated tumours ($n = 3$) averaged 79% positive cells.

53% of tumours were positive for TWIST. 48% of tumours were positive for SIP1. ZEB1 positive cells were observed within the surrounding stroma.

Conclusion: SLUG, TWIST, and SIP1 are variably expressed by tongue SCC's. There is a trend towards increased SLUG positivity in poorly differentiated SCC. Further work is required to determine the relevance of ZEB1 positive cells in stroma.

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Management of Warthin's tumour of the parotid gland

Haimisha Mistry *, Sunil Sah, David Laugharne

Royal Derby Hospital, United Kingdom

Introduction: Warthin's tumour is the second most common benign neoplasm of the parotid gland, comprising 4–30% of all parotid tumours. There is still some discussion regarding the treatment options for Warthin's tumour. This study reviewed the management of Warthin's tumours diagnosed by ultrasound guided FNA cytology.

Aim: To review the accuracy of US guided FNA cytology diagnosis of Warthin's tumour. We also discuss and evaluate the treatment strategy for management of these tumours by different surgical specialities.

Methods: 144 patients who had a cytological diagnosis of Warthin's tumour over a 13-year period were reviewed. Histology was noted in those who had excision. Where possible, the reason not to undertake surgical excision was also recorded.

Results: Out of the 144 cases of FNA cytological diagnosis of Warthin's tumour, 100 cases were male and 44 cases female patients. 77 cases underwent surgical excision. Histological diagnosis of Warthin's tumour was confirmed in 66 (85.7% true positives) with a different diagnosis in 11 (14.3% false positives). Of these, 5 cases (45.5%) were benign and 6 cases were malignant (54.5%).

Of the 144 cases 40 cases were managed by the oral & maxillofacial (OMFS) team, 73 by ENT, and 31 by general surgeons. Most of the conservative management was considered by General surgeons.

Conclusion: Warthin's tumour is usually treated surgically to confirm histological diagnosis. This study highlights the potential risk of adopting a conservative approach in light of the 6 out of 77 which proved to be malignant.

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