

Retrospective review of patient pathway in periocular lid tumours in Tayside

F. Anderson (Dundee Medical School), H. Murgatroyd (Ophthalmology Department, Ninewells Hospital, Dundee)

Introduction:

- Removal of periocular skin lesions, benign and malignant, make up a significant workload on the Tayside oculoplastic service.
- 237.9 patients per 100, 000 had non-melanoma skin cancer (NMSC) in Tayside in 2017.¹
- Surgical options used include excision with **immediate closure** or delayed closure with **conventional formalin, frozen section, or Mohs surgery**.

Aims:

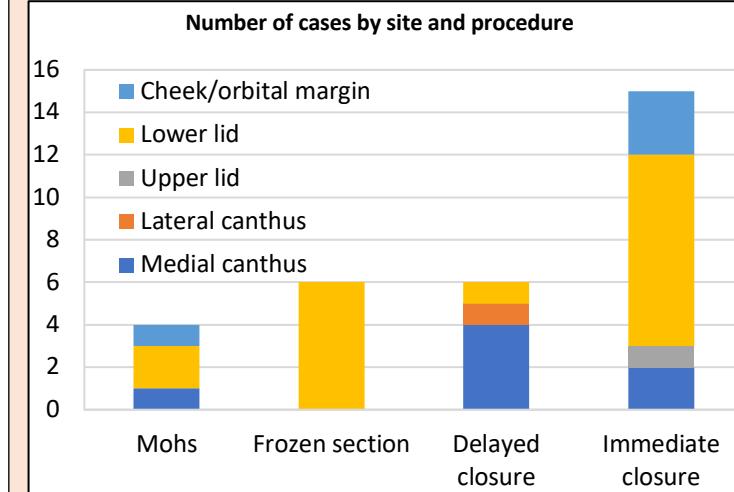
- Audit to identify when each of the surgical options are being chosen with **Non-melanoma skin cancer: United Kingdom national multidisciplinary guidelines²** used as the standard.
- To develop a streamlined decision making algorithm for procedure selection, as an adjunct to clinical judgement.

Method:

- Patients identified from theatre diary between September 2018 and September 2019.
- Patient demographics & comorbidities, lesion size & location, histological diagnosis, and procedure planned and undertaken recorded from Clinical Portal.
- Patients excluded for non-lid tumour procedures and insufficient data.
- Planned procedures compared to the standard and to each other for correlation.

Results:

- 38 patients identified with 2 excluded. Age range: 34-97.
- Most common lesion was BCC (n=20), followed by actinic keratosis (n=6), SCC (n=2) and the remainder distributed amongst a range of pathologies.
- Immediate closure was most common in all age groups except 40-59 where frozen section was more common.
- Mean lesion size for each group: frozen section 7.00mm, formalin 6.33mm, immediate closure 6.42mm. No size data was found for Mohs lesions.
- 4 out of the 7 planned for frozen section actually had formalin fixation at the request of the lab.



Conclusion:

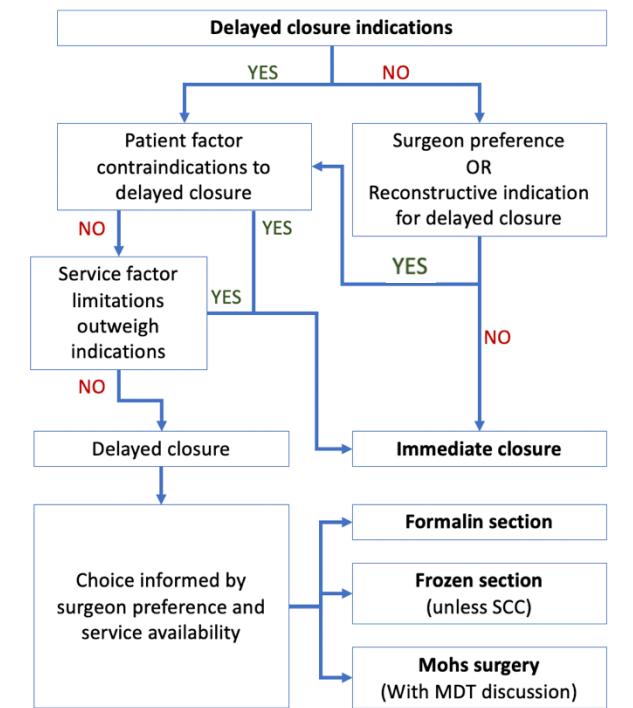
- Surgery planned was in keeping with the guideline in relation to recurrent BCC and areas with limited margin availability.
- Variation from the guideline existed in the management of periorbital BCC with immediate rather than delayed closure.
- A tendency for frozen section to be converted to formalin fixation at the request of the histopathologist.
- The guideline takes in mostly lesion related factors of size, location and clinical appearance.
- Factors influencing variation from the guideline could include:
 - Patient factors:**
 - Comorbidity precluding repeat or prolonged procedures
 - Informed choice
 - Service factors**
 - Clinician availability
 - Theatre availability
 - Laboratory availability
 - Reconstructive factors**
 - Primary closure
 - Complex flap or graft reconstruction
 - Surgeon preference and judgement.**

Guideline indications for delayed closure on clinical appearance:²

- BCC with less than 4-5mm margin available
- High risk BCC
 - >2cm diameter
 - Central face (incl. orbits but excl. cheeks)³
 - Poorly defined clinical margins
 - Failure of previous treatment
 - Immunosuppression
- High risk SCC
 - >2cm diameter
 - Failure of previous treatment
 - Immunosuppression

Conventional frozen section not recommended in SCC, but Mohs may be appropriate following MDT discussion

Proposed decision making algorithm:



References:

1. Public Health Scotland. Cancer incidence: Skin (xls - 3MB). National Statistics; 2020. Available from: <https://beta.isdscotland.org/find-publications-and-data/conditions-and-diseases/cancer/cancer-incidence-in-scotland>
2. Newlands C, Currie R, Memon A, Whitaker S, Woolford T. Non-melanoma skin cancer: United Kingdom National Multidisciplinary Guidelines. The Journal of Laryngology & Otology. 2016;130(S2):S125-S132.
3. Telfer N, Colver G, Morton C. Guidelines for the management of basal cell carcinoma. British Journal of Dermatology. 2008;159(1):35-48.