Adapting the pathway for Mohs surgery with oculoplastic reconstruction during the COVID pandemic: our experience at a tertiary centre

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Introduction

Mohs micrographic surgery is considered to be the gold standard treatment for non-melanoma skin cancers[1]. For periocular tumours, Mohs surgery is typically combined with oculoplastic reconstruction to optimise cosmetic and functional results[2].

Prior to the COVID pandemic, each patient in our Trust who required Mohs surgery with oculoplastic reconstruction had to undertake several hospital visits. After an initial dermatology consult and pre-assessment, they were referred for an oculoplastics consult and pre-assessment. Patients attended the Dermatology Surgery and Laser Unit (DSLU) for their Mohs procedure on one day, and returned the next day to Eye Theatres for reconstruction.

The pre-existing pathway could not continue during the COVID pandemic. To comply with local guidance, patients were asked to isolate for 2 weeks between Mohs surgery (as DSLU was on an Amber pathway) and oculoplastic reconstruction (as Eye Theatres were on a Green pathway). This was impractical for patients and increased the risk of cancellations.

Pathway adaptation

In July 2020, the pathway was adapted so that patients have Mohs surgery with same-day in-house oculoplastic reconstruction under local anaesthesia in DSLU. Patients are listed for both surgeries when they attend their dermatology consult and pre-assessment.

The separate ophthalmology consult and pre-assessment are no longer required. With Mohs surgery and reconstruction both taking place in DSLU, this also frees up space in Eye Theatres.

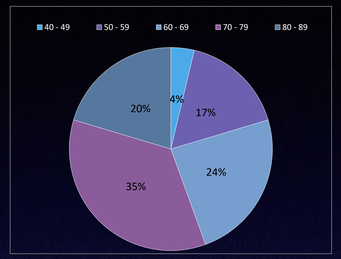
Audit process

Patients who had Mohs surgery with oculoplastic reconstruction in an 8-month period during the COVID pandemic were identified using PIMS. From operation notes and clinic letters on EPR, data was extracted about patient age, histological diagnosis, size of Mohs defect and type of reconstruction.

Fig. 1: Histological diagnosis of periocular tumours excised in Mohs surgery in our patient group

Diagnosis	Number of cases	% of total cases
BCC	51	94.4%
SCC	1	1.85%
Lentigo maligna	1	1.85%
Lichenoid keratosis	1	1.85%

Fig. 2: Patient age (years) at time of surgery



Results

PIMS identified 54 patients who had Mohs surgery with oculoplastic reconstruction between 6/7/20 and 15/3/21. 53 patients had same-day in-house reconstruction in DSLU under local anaesthesia. 1 patient had next-day reconstruction because they requested general anaesthesia, which is not offered in DSLU, so the reconstruction had to be done in Eye Theatres.

In most cases, the histological diagnosis was BCC (fig. 1). At the time of surgery, the average patient age was 69 years (fig. 2).

The size of Mohs defect (fig. 3) ranged from 21 mm² to 800 mm², with the average defect measuring 251.6 mm². Most defects were reconstructed using a local flap (fig. 4).

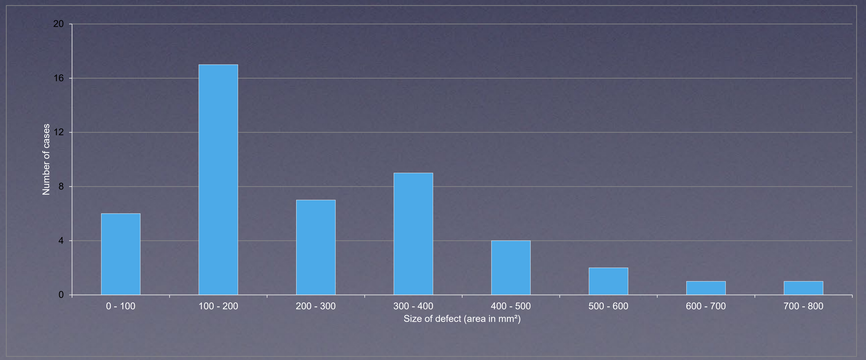


Fig. 3: Size of Mohs defect (area in mm²) as documented in operation note

Discussion

The new pathway has been well-received. Although the changes arose out of necessity during the pandemic, going forwards we are keeping the new pathway as it is a better use of resources and more convenient for patients than the previous format.

In our Trust, every alternate week, 4 patients have Mohs surgery with same-day in-house oculoplastic reconstruction under local anaesthesia. This equates to 8 patients each month, or about 100 patients each year. Since July 2020, we have now operated on about 130 patients in this way.

Our new pathway reduces the number of hospital appointments by 2 for each patient. Taking the average cost of a hospital appointment to be £120 (as estimated by NHS England), our new pathway saves the Trust approximately £240 per patient.

Performing oculoplastic reconstructions in DSLU saves approximately 60 to 90 minutes of time in Eye Theatres per patient. Although that time is spent in DSLU instead, the hospital costs are lower in DSLU compared to Eye Theatres.

There are personal savings for patients in terms of reducing travel costs, time spent waiting in hospitals, and time in self-isolation between appointments. In our service, almost all patients preferred to have Mohs surgery and oculoplastic reconstruction under local anaesthesia on the same day. For individual patients who prefer to have general anaesthesia, next day reconstruction can be performed in Eye Theatres with an anaesthetist on the list.

At a time when many units were struggling with Green pathways and competing for limited Amber theatre space, our pathway enabled us to continue operating throughout the pandemic. Currently, we have no backlog; patients with a routine BCC are booked for surgery within 2 to 3 months of their dermatology consult. We feel that this model of in-house oculoplastic reconstruction can be introduced in other Trusts to streamline periocular tumour services.

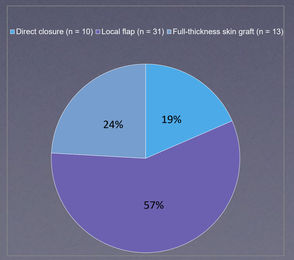


Fig. 4: Type of oculoplastic reconstruction

DSLU = Dermatology Surgery and Laser Unit. PIMS = Patient Information Management System. EPR = Electronic Patient Records. BCC = Basal cell carcinoma. SCC = Squamous cell carcinoma.

References:

[1] Seven years' experience of Mohs micrographic surgery in a UK centre, and development of a UK minimum dataset and audit standards. L Macfarlane. Clin Exp Dermatol. 2013 Apr; 38 (3):262-9

[2]Oculoplastic reconstruction following Mohs surgery. C Inkster. Eye 12, 214-218 (1998)

[3]NHS to trial tech to cut missed appointments and save up to £20 million. News, NHS England, 14 October 2018 england.nhs.uk/2018/10/