Guidelines on the Management of Skin Cancer/Melanoma during Covid-19 Crisis

Irish Association of Plastic Surgeons ***29 March 2020***

It is recognised that management of cancer in general will have to undergo some short-term changes during the Covid-19 crisis (1). With regard to Malignant Melanoma, there have been recent guidelines proposed by groups in both the UK (2,3) and the NCCN in the USA (4) in the last week or so. In IAPS, we have decided to formulate our own guidelines to for the management of Malignant Melanoma and Non-Melanoma Skin Cancers (NMSC) in this document. We have outlined some suggestions based on the current and evolving Covid-19 situation in Ireland, incorporating some of these two slightly different guidelines, (although they are broadly in agreement).

I. Suggested Management of Malignant Melanoma

1. Referral of Pigmented/Suspicious Lesions

Ideally, this should be done as much as possible using aids such as photography and dermoscopy images at Pigmented Skin Lesion clinics as much as possible. Consideration should be given to "virtual clinic" with video/photography when "seeing" the patient and their skin lesion. Most patients or their relatives have a smart phone with camera/video capability so a "telemedicine" approach could avoid hospital attendance during this time. While it is recognised that effective consult on telemedicine is usually only possible if the patient has been seen by an appropriately qualified specialist (eg Dermatologist, experienced GP), the limitations may have to be modified during the Covid19 pandemic. Several detailed guidelines have been published about telemedicine and telephotography including the British Association of Dermatologists (5) and American Medical Association (6). Specific guidelines on plastic surgery are sparse and mainly related to trauma (7)

The aim of this approach would be to have a high index of suspicion for all cases attending in the assumption that the lesion needs to be urgently removed in those who attend. Therefore it should be feasible to do this as a "See & Treat" episode with lesion removal during the same visit to minimise hospital attendance to one visit only.

2. Excision Biopsy of Primary Lesion

Pigmented or suspicious skin lesions should be fully excised with a 2mm margin in most cases and closed primarily. If there appears to be a very large/wide lesion suspicious for a Lentigo Maligna, incisional biopsy of the most concerning dark area could be carried out. We would not advocate shave biopsies. Punch biopsies could also be considered, especially in large or fungating tumours, or tumours where clearly complex reconstructive surgery would be required if complete excision needed to be carried out.

As much as possible this should be done as a "See & Treat" approach under Local Anaesthesia (LA), separate to the main theatres or hospitals where Covid-19 cases may be located. All cases which are positive for melanoma on excision or biopsy should be listed for the MDM (Multi-Disciplinary Meeting) and discussed as normal.

Patients should be informed of their diagnosis and subsequent plan by phone/telemedicine consultation.

3. Wide Local Excision of Primary Melanoma

Wide Local Excision (WLE) following confirmation of the diagnosis of melanoma should be done in most cases under LA. In many cases, the initial excision may be sufficient.

Melanoma In-Situ cases, where the margins are not clear/incompletely excised should be delayed for 3 months when the Covid19 crisis has abated.

Invasive Melanoma cases, which have clear margins and are completely excised, but require wide local excision (WLE) can be delayed for up to 3 months in most patients. The timing of the WLE will largely depend on the need for and availability of Sentinel Node Biopsy, which will require a General Anaesthetic (GA) as discussed below.

As with initial excision biopsy, results and discussions should be done by phone/telemedicine

4. Sentinel Lymph Node Biopsy

Sentinel Lymph Node Biopsy (SLNBx) does provide some regional control but it is mainly an important staging which helps guide adjuvant therapies, rather than a therapeutic procedure. It requires specialised radiological facilities and a GA, therefore requiring an anaesthetic with full theatre facilities and resources which is very likely to be in increasingly short supply over the next few months. Hospital attendance and GA also greatly increases the risk to non-Covid19 patients becoming infected with the Covid19 coronavirus, with some reports that the Covid19 infection acquired in theatre under general anesthesia can result to a much more severe infection than if community acquired.

It is likely that SLNBx will have much more limited (if any) availability during the crisis. SLNBx can be deferred in most, if not all cases for 3 months. If it is available, priority should be given to pT2b – pT3b (1-4mm depth), then pT4 (>4mm) and pT1b with high risk features (high mitotic rate, lymphovascular invasion (LVI) and young age). If the melanoma is only biopsied for diagnostic reasons, but there is still a large clinical melanoma is still present, then complete

excision (with SLNBx if possible) is recommended. Each case should be discussed at the MDT on its own merits.

If SLNBx is not available, which seems likely, then WLE should be performed with direct closure with at least 2mm margin while waiting for the pandemic to clear followed by delayed SLNBx or alternatively with a 10-20mm WLE margin carried out as appropriate and SLNBx not done later on. These decisions on WLE/SLNBx can be individualized for each patient and discussed at the MDM.

As with other patient communication, the discussion of results and plans for further management can be carried by phone / telemedicine.

5. Lymph Node Involvement

If Sentinel Node has been carried out and is positive, it is preferable that completion lymphadenectomy, if advisable on the current international guidelines, is deferred and close surveillance using ultrasound or other radiological techniques offered instead.

If there are clinically palpable nodes positive for melanoma metastases, patients should have radiological investigations for staging purposes. The options of surgery (lymphadenectomy) if isolated nodal disease only, or neoadjuvant treatment can be discussed with oncology at the MDM.

Surgery, if agreed, should be done with early discharge and as minimal hospitalisation as possible including going home with a drain.
Neoadjuvant therapy includes Ipilimumab, Nivoluminab and/or directed immune therapies such as BRAF/MEK inhibitors as per oncology

In general, in patients with stage three and four melanoma, a referral to medical oncology for consideration of systemic treatment can be made if deemed appropriate and feasible in the circumstances by the treating oncologist

Adjuvant therapy for Stage III Melanoma can be considered following surgery but preferably with less taxing regimes for patients with the least amount of hospital visits and infusions. This is within the remit of oncology and can be discussed at the MDM.

6. In Transit Metastases

These can be excised if not extensive under LA. Multiple rapidly progressing in-transit metastases requires discussion at the MDM as well as timely radiological assessment for regional/ systemic metastases.

7. Systemic Metastases

Surgical Resection should only be considered if a confirmed isolated melanoma metastasis is detected that is potentially resectable and likely to markedly

improve the quality of life/symptoms of the patient, bearing in mind the reduced availability of theatre, anaesthesia and hospital beds which is likely to make this approach unlikely. This approach can be discussed at the MDM

Systemic treatment can be considered bearing in mind the likely toxicity and possible blunted immune response to the Covid19 virus. Similar ***immunotherapy*** regimes can be used as outlined above with ipilumimab, novoluminab or directed immune regimes such as PD-1 blockade, BRAF or MEK inhibitors. Less toxic oral ***chemotherapy*** treatment such as Temozolamide can also be considered. Other considerations include ***radiotherapy*** such as stereotactic radiosurgery for brain metastases. These are largely oncological decisions which can be discussed at the MDM.

Palliative care can also be discussed with the patient and their family.

MDM meetings should proceed as normal by video or teleconference as much as feasible. Careful records need to be kept of deferred patients, such as those requiring WLE/Sentinel Node Biopsy.

II. Suggested Management of NMSC

Unlike malignant melanoma, there are no detailed guidelines yet available on the management of NMSC during the Covid19 pandemic, although the Bristish Association of Dermatologists suggest deferring much NMSC excisions for 3-6 months(3). NMSCs are much more common than melanoma, represent the overwhelming majority of skin cancer seen in our practice and for the most part are expected to do well with relatively simple surgical excision and closure under LA. Most patients with NMSC are in the elderly age bracket and are therefore more at risk of a severe, life-threatening Covid-19 infection than the younger age group and therefore the management of their NMSC may best be delayed until the pandemic clears.

Surgical excision of NMSC is preferably carried out in a separate “minor” theatre, preferably not in a Covid-19 location. Larger tumours or those in more difficult anatomical locations may require reconstruction such as a skin graft or local flap but this can still be performed under LA in a minor theatre setting. It is likely that even minor theatre facilities with nursing support will be limited during the crisis and this must be taken into account when planning management of NMSCs. Most procedures, even in a minor theatre, will probably now require PPE precautions including FFP3 mask, full gown, gloves and goggles (1, 3).

There are however exceptions to most NMSCs, such as in the case of extensive, rapidly growing and aggressive tumours especially in those who are immunosuppressed for various reasons. Aggressive pathologies include Merkel cell tumours, poorly differentiated squamous cell carcinoma and cutaneous sarcomas. These require early diagnosis and treatment and should remain a

priority as delay in treatment of such higher risk and more aggressive tumours will have a significant detrimental outcome.

All procedures will require the patient, who is usually elderly, to leave their home and "self-isolation". The Government appointed age for "cocooning" is 70 years of age and became mandatory on 27th March. The benefit of early surgical excision should be discussed with the patient and their family and should outweigh the risk of delayed excision and the risk possible infection with Covid-19.

1. Referral of NMSCs

The same principle of referral should apply as with suspicious pigmented lesions, ideally with photography and telemedicine. Active efforts should be made to reduce the number of patient visits at all times, including encouraging telemedicine and see and treat when feasible and appropriate, acknowledging that there will still be indications for face to face consultation if deemed necessary. Presumptive diagnosis of BCCs or smaller SCCs can be managed with delay in excision or biopsy.

2. Excision or Biopsy of Presumed NMSCs

As the vast majority of NMSCs have an excellent prognosis and are slow-growing, most assessments/ treatments can be delayed until after the Covid19 crisis. Smaller lesions, favourably located and with clinically less significant pathology can be managed by booking for priority excision post crisis. If the clinical diagnosis is uncertain but felt to be a significant risk, or likely to require a more extensive reconstruction if delayed, it may be deemed appropriate to carry out a biopsy firstly and manage the patient based on the clinical picture and histology once available. Routine biopsies should not be performed in other circumstances. Larger or fixed tumours may also require radiological assessment.

3. Basal Cell Cancers

The vast majority of BCCs are slow-growing and assessment/treatment can be delayed until after the Covid-19 crisis. Only occasional BCCs in difficult areas with associated significant symptoms such as larger BCCs involving the inner canthus/eyelid or peri-orbital area may benefit from early surgery. In general, each patient's management can be individualised, but we recommend delay until after the Covid19 crisis to minimise the risk of Covid19 to the patient.

4. Squamous Cell Cancers

As with BCCs, the majority are relatively minor and surgery or other treatments can be delayed. However, more advanced, symptomatic tumours may benefit from earlier intervention. Early surgery should be carried out for T2 tumors (>2cm) and above, under LA if possible. Biopsy can be helpful in obtaining a definitive diagnosis and any high risk histological features identified (eg poorly

differentiated, LVI etc). Radiological assessment with CT / MRI scanning may be required in some cases. Such patients ideally should be discussed in the MDM.

5. Merkel Cell Cancers

These are aggressive tumours and should be managed early. The smaller tumours may be hard clinically to distinguish from less aggressive tumours such as BCCs , so there is a real risk that these rarer tumours can be missed and hence should be included in differential diagnosis in older patients. All Merkel cells should be discussed at MDM and undergo wide excision and/or post operative radiotherapy should be considered.

6. Skin Sarcomas

These are usually more aggressive and often behave like high risk SCCs. They can de difficult to diagnose without biopsy. Early Wide local excision is usually required with discussion at the MDM for consideration of further management such as radiotherapy.

Summary of Melanoma Guidelines from UK & USA with IAPS Guidelines

Issue	UK Guidelines	USA (NCCN)Guidelines	Suggested IAPS Guidelines
Referral of Lesions	1. Photography/ Dermoscopy image in the referral 2. See & Treat	1. Evaluate by "telehealth"	Combine both UK/USA guidelines if possible
Excision/ Biopsy	1. See & Treat with 2mm margin 2. All pathology at MDT 3. Phone patients results	1. Full excision bx if possible 2. Shave bx for larger LMM	1. See & Tx 2. Margin 2mm 3. No shave bx 4. MDM as normal but by teleconference 5. Phone results
WLE Primary	1. All "quickly by junior surgeons" 2. If no SLNBx facilities, excise primary 1cm margin in longitudinal fashion 3. Delayed SLNBx not appropriate in H&N 4. Phone results	1. In Situ Delay 3 mo 2. Clear margins any depth Delay 3mo 3. T1 mm <1mm Delay 3 mo if majority removed 4. Surgery for T3/4 take priority over T1/2 (<2mm) except if large amount remaining from bx	1. As USA guidelines 2. As UK if no SLNBx 3. Phone results
Sentinel LN Bx	1. Each region assess own capacity	1. T1b MM Delay 3 mo, unless high risk*	As both guidelines (Essentially likely delay

	2. Do for pT1b-4b 3. If less facilities, pT2b-3b highest priority, then 3b-4b	2. Delay SLNBx for 3 mo unless having WLE in OR	until after crisis) Careful records kept of deferred patients
SLNBx Positive		1. Defer completion lympadenectomy. Do U/S surveillance	As USA guidelines
Nodal Management	1. Surgery as primary tx as adjuvant tx may not be available 2. Discharge early with drain in	1. Defer U/S surveillance in asymp resected pts (3-6 mos) 2. Defer therapeutic lymhadenectomy and offer immunotherapy	1.Defer U/S as USA 2. Radiology assessment. 3. MDM discussion 4. Surgery v ImmunoRx,
Metastases	1. Excise in transit mets 5mm margin 2. Multiple lesions quickly discuss at MDT	1. Resect only if "symptomatic/critical"	1. Excise if easily under LA 2. Discuss at MDM 3. Otherwise as USA
Immunotherapy	1. Consider locally 2. Possibly not as neoadjuvant tx during crisis	1. Start 12 weeks after surgery 2. Drugs with least frequency 3. Options Pembro, Nivo or BRAF/MEKi Inhibs	1. As UK 2. Discuss with Oncology
Stage IV / Systemic Mets	1.Consider surgery if possible 2. Single agent 1st line 3. If targeted, consider Ecorafenib/Binimetinib	1. Least toxicity 2. Unknown response to Covid19 3. Consider PD1 if no brain mets	1. Surgery only if not systemic and worthwhile 2. Discuss with Oncology
Pathology	1. Do excision rather than bx 2. Develop local policy for double reporting		As UK
Follow Up	1. Offer virtual or standard 2. Avoid seeing over70s	By telehealth	Virtual if possible

- *High risk features: LVI, high mitotic rate, young age*

Summary of Suggested IAPS Guidelines for NMSC

Referrals

Minimise as much as possible
Triage GP letters into "Emergency", Urgent, Soon, Routine
Only "see" (on a "see & treat" bases) "Emergency" cases
Use phone consultations/ photography / telemedicine

Excision/Biopsy	Delay excision vast majority until after crisis Biopsy only in large, fungating or uncertain diagnosis "See & Treat" larger tumours with reconstruction under LA if facilities available
BCCs	Delay (except certain areas such as peri-orbital)
SCCs	Delay unless T2 / Advanced "See & Treat" with immediate reconstruction Biopsy may be justified for diagnosis and treatment plan Radiology only in advanced complex cases Avoid GA as much as possible
MCCs	Don't delay. May only be diagnosed on biopsy. "See & Treat" as per SCCs
Skin Sarcomas	As MCCs

References

1. RCSI / NCCP Guidelines on Surgical Practice (many useful links)
2. UK Guidelines on Melanoma during Covid19 Crisis
3. BAD Guidelines on Skin Cancer Management during Covid19
4. NCCN Short-term Recommendations for Cutaneous Melanoma Management During COVID-19
5. BAD Documents on Teledermatology
6. AMA Guide to Telemedicine
7. NHS UK Guidelines on Management of Patients Needing Plastic Surgery during Coronavirus Pandemic