

Skin cancers 2015

Epidemiology

1. There are many types of skin cancers, including some that are very rare, but three types (basal cell carcinoma [BCC], squamous cell carcinoma [SCC] and malignant melanoma [MM]) are responsible for more than 95% of all skin cancers. BCC and SCC are often grouped together as non-melanoma skin cancers [NMSC].
2. Taking all types together, skin cancer is the most common cancer with over 80,000 registered cases per year in the UK; this is acknowledged to be an underestimate, particularly for BCC. Incidence of MM and NMSC is rising. More than 10,600 cases of MM, the less common but more dangerous form of skin cancer, were diagnosed in the UK in 2006 and incidence rates have more than quadrupled since the 1970s. Melanoma is now the second most common cancer in young adults (aged 15-34) in the UK and almost one third of all cases occur in people under 50. In 2008, 2,067 people in the UK died from the disease. If current trends continue, it is anticipated that there will be around 15,500 cases of melanoma diagnosed per year within the next 15 years. Similarly, the incidence of NMSC is set to increase over the next 5 years due to factors including an aging population and a general increase in UV radiation exposure of the skin through altered behaviour.
3. Progress in improving national skin cancer registration has been slow. Better data (including data on co-morbidity, staging and performance status) is essential for informed cancer service planning, evaluation of prevention strategies and improved management of patients. By 2015, significant progress should be made in this area. The National Cancer Intelligence Network (NCIN) should work with practitioners throughout the patient pathway to ensure universal compliance on measuring, recording, and reporting data to the skin cancer registry. Compliance with data collection should be monitored via peer review.

IOG Implementation

4. There has been progress to implement the skin cancer IOG since 2007, but barriers to comprehensive implementation remain. By 2015, to continue to drive progress, a refreshed IOG that includes the following should be developed and implemented:
 - i. The criteria for peer review should be developed to cover more than just the basic, minimum standards of care and should reflect the holistic issues that are important for each person with a melanoma, including psychosocial care and support;
 - ii. an increase in workforce including consultant dermatologists, clinical & medical oncologists with a specialist interest in skin cancer, plastic and other skin surgeons, specialist pathologists, and clinical nurse specialists (CNSs);
 - iii. Parallel working in clinics of surgeons, specialist nurses, dermatologists, plastic surgeons and oncologists should be encouraged to help drive up the quality of care and patient

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- outcomes. This way of working should reduce the number of patient visits and deliver truly multi-disciplinary care for patients;
- iv. A strategic review of the nursing workforce in melanoma should be undertaken to ensure that the division of labour between doctors and nurses is clarified so that both can be deployed more effectively; and
 - v. The introduction of melanoma Quality Standards in a refreshed IOG on skin tumours including melanoma would provide a robust service framework and outcome goals that will guide the new GP consortia in commissioning skin cancer services.

Prevention

5. Effectiveness of the UK Government funded public education campaign, SunSmart, in preventing/ reducing skin cancer requires considered evaluation as the long-term impact will not be known for many years. However, the campaign has led to an increase in awareness of SunSmart behaviours among target populations. There is also evidence that the longer-term Australian equivalent of the SunSmart campaign has been effective in reducing the rising incidence of MM. There is general agreement that such campaigns in this country are likely to lead to increased awareness and may promote earlier detection of skin cancer (which influences prognosis and treatment complexity). There is therefore agreement that sustained action needs to be taken to prevent and/or encourage earlier diagnosis of skin cancer through several routes.
6. By 2015, it is proposed that:
 - i. skin cancer charities should work collaboratively with public health directors to target messages about the dangers of overexposure to the sun and the importance of early detection to the most susceptible groups. This could be in the form of local pilots as currently being tested in breast, lung and bowel cancer;
 - ii. full implementation of the NICE guideline on skin cancer prevention by local authorities and public bodies;
 - iii. clear and targeted information for professionals that come into contact with people's skin e.g. pharmacists, hairdressers, physiotherapists, swimming instructors, on how to spot the signs of skin cancer and how to advise people on the need for swift GP advice;
 - iv. development and implementation of regulations to support the Sunbeds (Regulation) Act 2010, to ensure that all salons are supervised and that all adult users are provided with health information warning about the dangers of sun exposure;
 - v. the phasing out of sunbeds on local authority premises. Their presence gives a conflicting message; and
 - vi. continued education about the dangers of sunbed use to adult users.
7. In addition, the group believes that specific action should be taken to alert children, teenagers and parents to the risks of too much sun exposure. Whilst sunburn at all ages increases the risk of MM, children are at particular risk. Sustained public health promotion is reported to have helped to cut deaths

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from, and initiate a reduction in incidence of, MM in the younger generations in Australia. Whilst reduction in skin cancer incidence remains a long term goal in the UK, such campaigns also provide skin cancer education that may facilitate earlier detection.

8. By 2015 it is proposed that DH should liaise with DFE to target all schools (including primary and non-state schools) and parents about sun exposure. In particular:
 - i. ensuring that guidance is developed as part of the schools building programme to ensure that plans include shade in playgrounds and, where possible, grass (as this absorbs UV rays whereas concrete reflects it);
 - ii. raising parent and school awareness about the dangers of sun exposure and advising what they can do to minimise this, for example, ensuring children wear hats when out in the sun, have appropriate cover up clothing, and make use of shade;
 - iii. reassessing ways in which sunscreen can be available and, where necessary, applied, for children in a school setting; and
 - iv. asking the HSE to develop and enforce general health and safety guidelines on UV exposure of the general public with a particular emphasis on those at higher risk such as children, young people and outdoor workers. However, it will be important to ensure that enforcement is not over zealous eg. cancelling sports days because the weather is too good – the focus should be on managing risk in a responsible way.
9. Studies are on-going to identify the patterns and amounts of UV exposure that, in the absence of oral vitamin D supplements, provide adequate vitamin D levels. Current evidence supports that vitamin D requirements can be obtained by short exposures to UV i.e. less than the sunburn threshold. More evidence will be available on this topic by 2015.
10. It is not yet known what the long-term impact of the increase in self-tanning lotions will be. The numbers of Britons holidaying abroad and using sunbeds continues to increase and it is suspected that self-tanning products may be used as an additional measure rather than a substitute.
11. There is some evidence that some skin cancers might be caused by HPV oncogenes. It will be important to see if there is any impact on skin cancer in the HPV vaccinated cohort of young women receiving the HPV vaccine as part of the national programme. Such information is unlikely to be available by 2015.

Screening

12. There will be no evidence to support a national population based screening programme for melanoma by 2015. However, there may be scope for some targeted screening in identified higher risk groups such as:
 - i. elderly men who tend to have thicker melanomas and the highest mortality rate from MM through delayed diagnosis;

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- ii. those with red hair & fair skin who tend to be more sensitive to the sun and therefore at risk of skin cancers;
- iii. those who have greater than average UV exposure due to occupational and leisure activities;
- iv. people with multiple moles; and
- v. those with immunosuppression in particular, organ transplant recipients.

13. In addition it is likely that there may be more private walk-in screening centres and more use of digital photography to seek second opinions on skin lesions over the next 5 years. It should be noted that these methods have not been adequately assessed in clinical trials.

14. By 2015 it is suggested that:

- i. GPs should receive more training in dermatology and that mandatory training in how to recognise melanoma should be considered; and
- ii. an easy to follow guide for healthcare professionals should be developed by the Department of Health/ Public Health England in conjunction with professional and patient group partners on different sorts of lesions.

Diagnosis & Staging

15. In the next 5 years there is likely to be more widespread use of techniques available intended to aid diagnosis such as digital screening, digital imaging technology, dermoscopy and confocal microscopy. These require robust assessment before becoming established in clinical practice. However, whatever techniques are introduced, they will not replace the need for a specialist clinical and histological assessment. There therefore need to be sufficient specialist histopathologists in place and uniform standards of diagnosis across the country. This might require more centralisation of specialist histopathologists for second opinions which would require individual specialists to work in teams for cover and education and potentially be attached to specialist centres. Specialisation does not necessarily mean centralisation but even if it did there is no evidence to show that histopathologists need to be close to the patients. They need good communication between each other, preferably, but not necessarily on one site. Having a good pathology service will benefit all the population served not just those geographically close.

16. There are also likely to be advances over the next 5-10 years in techniques to establish prognosis. Sentinel node biopsy is the current best technique for prognosis. Over the next 5-10 years, advances in the identification and development of biochemical/ DNA based markers of disease are likely as the genome mapping of MM takes place. Significant progress has already been made in this area which may in turn influence treatment regimes.

17. By 2015 it is suggested that:

- i. better training and guidance for GPs and primary care professionals on dermatology and the signs of skin cancers will improve patient outcomes and enable them to become more involved in the implementation of the IOG at that level;

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- ii. national standards, perhaps NICE guidance, on the use of Sentinel Node Biopsy (SNB), based on robust evidence of its usefulness as a staging tool, would provide much needed equity for patients and clarity to clinicians and commissioners about its role in the patient pathway;
- iii. the British Association of Dermatologists, British Association of Plastic Surgeons and the Melanoma Study Group need to regularly update multidisciplinary guidelines on diagnosing, staging and managing melanoma and other skin cancers; and
- iv. an evidence base must be compiled to aid the production of protocols to manage rarer skin cancers.

18. PET scanning for staging skin cancer is not widely available and its most useful roles have yet to be confirmed. Evidence is likely to develop over the next 5 years. More research is required but PET is not expected to have a routine role in the management of melanoma by 2015 although its use in this indication is expected to increase.

Treatment

19. Treatments for primary disease are developing year on year; more therapies including vaccines, more targeted adjuvant chemotherapy and topical treatments are likely to be introduced by 2015. Such new treatments may supersede current therapy.

20. The use of non-invasive techniques such as photodynamic therapy (PDT) are also expected to increase as is Mohs' micrographic surgery. There may also be new drug agents introduced for patients with advanced disease.

21. By 2015:

- i. patients should have equitable access to new treatments as they become available in the NHS to ensure that UK melanoma survival rates do not fall behind other comparable countries or tumour types. Patients should also have equitable access to information on all open clinical trials for new treatments in development and be given the choice to take part in them;
- ii. as further evidence about the recommended levels of Vitamin D becomes available, clear advice to patients as to how to balance their Vitamin D intake while avoiding sunburn should be urgently developed;
- iii. there should be efforts to encourage good working relations between dermatology, plastic surgery and other surgical specialities within clinic not just the MDT;
- iv. specialist multidisciplinary and multi-skilled skin oncology clinical teams sharing common resources may offer an effective method of service delivery;
- v. there should be equal access around the country to both photodynamic therapy (PDT) and to Mohs' surgery;
- vi. a patient pathway project should have been undertaken (co-ordinated by the Cancer Services Collaborative) to consider redesign of services, to ensure that services are integrated where

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- possible, and to identify inefficiencies so that savings can be released and reinvested; and
- vii. the NCRI research proposals to consider the effect of vitamin D on relapsed melanoma, and to identify predictors of relapse and response to treatment, should have progressed.

22. In addition, it is likely that there will be an increasing number of patients with metastatic disease (including those with loco-regional involvement) – their management will be different from those with primary skin cancers.

Supportive & Palliative Care

23. Surgery, radiotherapy and chemotherapy all have a role to play in palliation for skin cancer – the majority of patients with incurable skin cancer receive active treatment although this was not fully reflected in the IOG. Relevant waiting times for palliative treatment should continue to be met and patients treated in a timely fashion where waiting standards do not currently apply.

24. Supportive care issues that need to be addressed by 2015 (at the latest) are:
- i. lymphoedema support - patients with lymph node metastases of skin cancer (a minority, mainly those with intermediate or thicker melanoma) have a high risk of limb lymphoedema but little provision of support for this complication of surgery. By 2015, there should be fully funded local lymphoedema support services for these patients;
 - ii. psychological and quality of life issues may require greater consideration in patients having surgery for facial skin cancers - more support may need to be available;
 - iii. better provision of information to patients in a variety of formats and languages about skin cancer and skin cancer services;
 - iv. routine measurement of patient experience to demonstrate whether or not implementation of the IOG is having a positive impact on this issue;
 - v. patient information needs to clearly set out the following for patients: their entitlements; what the best practice patient pathway should look like; and how to seek to redress it if they do not get it; and
 - vi. the use of information prescriptions should be standard.

Follow up

25. The IOG sets out an approach to follow-up in the short-term but more evidence needs to be developed about the management of longer-term follow up which might include options for follow-up closer to home.

26. Research into follow-up is ongoing, but this is unlikely to have delivered conclusive findings by 2015.

Improving Outcomes: A Strategy for Cancer Stakeholders
December 2010