Cancer Society
Te Kāhui Matepukupuku o Aotearoa

Position Statement on Screening and Early Detection of Skin Cancer

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The Cancer Society of New Zealand does not recommend population screening for melanoma, basal cell or squamous cell skin cancer. We also do not endorse the practice of skin checks that occur outside medical practice or the hospital setting (eg. at community events) as a screening method, but recognise the value in promotional or educational activity that raises awareness of early detection or skin cancer prevention.

Recommendations

- All members of the public should be encouraged to become familiar with their skin. Individuals should regularly check all areas of their skin, including skin not normally exposed to the sun, for any change in shape, colour or size of a pigmented lesion or the development of a new lesion. Assistance should be sought from others to check difficult to see areas such as their back, scalp and back of the neck.
- At present there is no specific self-examination technique or recommended frequency of self-examination that has been shown to reduce morbidity or mortality from skin cancer. There is evidence, however, that the majority of melanomas are first detected by the individual concerned.[1]
- Individuals who are concerned about skin cancer or skin changes should promptly seek advice from a medical practitioner and discuss their skin cancer risk and need for medical checks or self-examination.
- People over the age of 50, particularly men, should be especially diligent when it comes to knowing or recognising any changes to their skin. In New Zealand, significantly more men than women develop melanoma and the death rate from melanoma is consistently higher among men.[2]

Screening

Screening involves testing asymptomatic individuals (those who do not have symptoms of a specific disease) who are at average risk of a particular disease for the purpose of identifying individuals who may have the disease. The term ‘screening’ specifically excludes the investigation of people with symptoms.[3]

Approaches to screening:

- **Population (or mass) screening:** the comprehensive testing of large groups of the (asymptomatic) population as part of an organised programme.
- **Opportunistic screening:** offered to people being examined for other reasons. Opportunistic screening occurs either because it is actively offered by a health professional or because it is requested by an individual.

Active surveillance programmes (ongoing assessment of those known to have had a cancer or to be at increased risk of a particular cancer) can be offered to individuals considered to be at high risk.[4]

Screening for skin cancer

The Cancer Society of New Zealand has developed a set of criteria for cancer screening (Appendix 1)[3] and has determined that, although cancers of the skin, particularly melanoma, are an important health problem, general population screening for skin cancers is not recommended.

Screening the general population for skin cancer does not meet the recognised criteria for the implementation of screening for the following reason:

- There is insufficient evidence (lack of studies) that screening the general population for melanoma offers reduced morbidity and mortality.[4,5,6] (This applies to the adult general population without a history of premalignant or malignant lesions.[5])

In addition, screening for non-melanoma skin cancer (NMSC) does not meet the recognised criteria for the implementation of screening (Appendix 1), because:

- the disease in the vast majority of cases is not life-threatening or serious enough to cause long-term illness.

Finally, although there are no serious risks from whole body skin examinations, it is not possible to conclude (insufficient high-quality evidence) whether or not screening for all skin cancers does more good than harm in the adult general population.[4,5] Possible harms include misdiagnosis (false positive lesions), overdiagnosis (non melanomas and thin melanomas that may have little potential for malignant spread and mortality), unnecessary biopsies, false reassurance and over treatment.[5]

Screening recommendations

The Cancer Society of New Zealand:

- does not recommend mass or population-based screening for melanoma or NMSC.
- recommends that general practitioners develop surveillance programmes for patients at high-risk (see Appendix 2 for high-risk categories).
- does not recommend that opportunistic screening by health professionals be encouraged as routine practice. However, general practitioners should remain alert for skin lesions with malignant features in the context of physical examinations performed for other reasons. (Asymmetry, border irregularity, colour variability, diameter greater than 6 mm (ABCD criteria) or rapidly changing lesions are features associated with an increased risk for cancer.[5])
- recommends that clinicians/general practitioners who identify patients with significantly increased risk factors for skin cancer inform patients about sun protection measures and offer them opportunity for a full body skin examination and an appropriate management plan with follow up depending on their individual level of risk.
- recommends that general practitioners should assess patients who are concerned and develop appropriate management programmes depending on their level of risk.

Where screening is undertaken, it should be done on the basis of informed choice. Individuals should be informed about the potential benefits and risks of screening and the likely implications of a positive or negative result. They should also be informed that they have a right to a second opinion should they remain concerned.[3]

Early detection

Recognition of early signs and the early seeking of medical advice are key factors in the early detection, effective treatment and survival from skin cancer, particularly melanoma.

Main types of skin cancer

Melanoma

Tumour thickness is the most important factor in survival after a melanoma diagnosis; in general, the thinner the lesion, the better the outcome.[7,8] Melanoma has a poor prognosis if the tumour is diagnosed at an advanced stage, reinforcing the need for awareness and early detection.

Individuals should also be alert to the ABCD of melanoma detection [9] and should remember to also check skin that is not generally exposed to the sun.

Non-melanoma skin cancer

Although early treatment for NMSC may reduce morbidity, costs of treatment and mortality, currently there is insufficient evidence (lack of studies) to know whether formal screening or other forms of early detection improve the outcomes for these cancers.[10] However, individuals should be aware of lesions, including scaly red patches that may bleed easily, ulcers or non-healing sores, particularly in areas exposed to the sun frequently.

Skin awareness

At present there is no specific self-examination technique or recommended frequency of self-examination that has been shown to reduce morbidity or mortality from skin cancer.[11] There is evidence, however, that a significant number of melanomas are discovered by people themselves,[12] by a partner or by a family member.[13]

Individuals should regularly check all areas of their skin, including skin not normally exposed to the sun for any change in shape, colour or size of a pigmented lesion or the development of a new lesion.

New technologies

There are various new technologies to assist the clinical diagnosis of skin cancer. These include dermoscopy (a technique that uses a hand-held magnifying device) and sequential digital imaging (the capture and assessment of successive images, separated by an interval of time, of one or many lesions to detect change).

The use of dermoscopy by trained and experienced health professionals is recommended by the *Practice Guidelines for the Management of Melanoma in Australia and New Zealand* as increasing diagnostic accuracy.[6] Regardless of whether or not these technologies are used, a careful whole body examination under good lighting is essential, with a biopsy (undertaken by the GP or a specialist) required for a definitive diagnosis.[4]

Commercial mole mapping services

The Cancer Society does not endorse or recommend commercial mole mapping services. 'Mole mapping' refers to a combination of technologies, including dermoscopy, total body photography and digital serial monitoring. The Cancer Society acknowledges, however, that mole mapping may be used as a form of surveillance (ongoing assessment) of those who are at high risk for developing melanoma.

For individuals who choose to use one of these services, the Cancer Society recommends they consider the following issues:

- **What services are offered?** (In particular, do they involve a total body skin examination or only an examination of particular spots/areas of concern?)
- **Who provides the service?** (In particular, what type/level of training has the provider received/ undertaken?)
- **Do they audit the results?** (The quality of the examination depends on the skill and expertise of the person doing the procedure and reading the images.)
- **How much will it cost?** (Will there be costs beyond the initial consultation? Will there be a charge for storing images? Are there additional charges for follow-up visits?)
- **What happens next?** (For instance, will a letter be sent to the consumer's GP with results?)

The Cancer Society recommends that individuals who are concerned about an unusual skin change should seek advice from a medical practitioner.

Skin checks/spot check programmes

While the Cancer Society recognises the value in promotional or educational activity that raises awareness of early detection or skin cancer prevention, we do not recommend the practice of skin checks (sometimes referred to as 'spot check') programmes/clinics outside of established medical practices or the hospital setting (e.g at community events). *This is because they have not been evaluated and because of concerns about the possibility of:*

- inadequate follow up and referral
- inadequate lighting (which could result in a lesion being missed)
- lack of privacy
- examination of single lesions without a full body examination
- the risk of creating a false sense of security among consumers.[4]

The Cancer Society recommends that public and health professional education programmes and resources focusing on the early detection of skin cancer are readily accessible.

The Cancer Society has the following information sheets for consumers:

- 'How and when to check your own skin'
- 'Where do I go to get my skin checked?'

  http://www.cancernz.org.nz/reducing-your-cancer-risk/sunsmart/early-detection-of-skin-cancer/

- 'Take time to spot the difference'

http://www.cancernz.org.nz/reducing-your-cancer-risk/sunsmart/sunsmart-resources/

Further information

Cancer Society of New Zealand: http://www.cancernz.org.nz Ph: (04) 494 7270 Fax: (04) 494 7271

Cancer Information Helpline: **0800 CANCER** (226 237)

New Zealand Guidelines Group. (2008). *Melanoma: Information for you, your family, whānau and friends.* http://www.nzgg.org.nz/guidelines/0141/melanoma_CR.pdf

The New Zealand Dermatological Society: http://www.dermnetnz.org/

Appendix 1: Cancer Society's criteria for cancer screening

1. The cancer is an important health problem.
2. The cancer is appropriate for screening (i.e. there is a recognisable early stage).
3. There is a suitable screening test (one which is acceptable and has adequate sensitivity and specificity).
4. There is high-quality evidence, ideally from randomised controlled trials, that screening is effective in reducing incidence and/or mortality.
5. There is agreement on the most effective treatment for people who are diagnosed with cancer or a cancer precursor (pre-cancer) as a result of screening.
6. Screening does more good than harm.
7. People with positive screening results will have access to timely and appropriate investigations and treatment.
8. Screening can be provided in a continuous manner in conjunction with necessary quality assurance and evaluation.

Appendix 2: Major risk factors for melanoma

Factors indicating high risk of melanoma:

- older age
- a personal history of melanoma
- a family history of melanoma in a first-degree relative (parent, brother or sister, child). This risk is higher if more than one relative had a melanoma, if they were young at the time or if one relative had more than one melanoma
- large number of moles on your skin (more than 50 moles)
- atypical (dysplastic) 'funny looking' moles on your skin
- a personal history of a previous non-melanoma skin cancer.

Factors indicating increased melanoma risk:

- skin colour (light versus medium or dark skin)
- hair colour (red or blond hair versus black hair)
- skin type (burn easily, never tan)
- skin damage due to sunburn.

From New Zealand Guidelines Group *Consumer booklet on melanoma*
http://www.nzgg.org.nz/guidelines/0141/Melanoma_CR.pdf

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5 U.S. Preventive Services Task Force. (2009). *Screening for skin cancer: Clinical summary of U.S. Preventive Services Task Force recommendation*. AHRQ Publication No. 09-05128-EF-3. Rockville, MD: Agency for Healthcare Research and Quality. http://www.ahrq.gov/clinic/uspstf09/skincancer/skincansum.html

6 Australian Cancer Network Melanoma Guidelines Revision Working Party. (2008). *Clinical practice guidelines for the management of melanoma in Australia and New Zealand*. The Cancer Council Australia and Australian Cancer Network, Sydney and New Zealand Guidelines Group.

7 Sneyd, M.J., & Cox, B. (2006). The control of melanoma in New Zealand. *New Zealand Medical Journal, 119*(1242) http://www.nzma.org.nz/journal/119-1242/2169.

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9 New Zealand Guidelines Group. (2008). *Melanoma: Information for you, your family, whānau and friends*. http://www.nzgg.org.nz/guidelines/0141/melanoma_CR.pdf

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