

Skin Cancer: Family history clinical decision support tool for risk assessment and management

Two (2) or more of the following family and personal history risk factors greatly (**5x risk of general population**) increase lifetime skin cancer risk (melanoma and non-melanoma):

- A first-degree relative with melanoma
- 50-100 nevi
- One (1) or more dysplastic nevi
- Red or blond hair
- Tendency to freckle
- Skin that burns easily and tans poorly or not at all



Management

- Counsel about skin self-examination and skin cancer prevention
- See 1/year by health care provider trained in screening for skin cancers

Any of the following family and personal history risk factors significantly (**10x risk of general population**) increase lifetime skin cancer risk (melanoma and non-melanoma):

- Personal history of skin cancer
- Two (2) or more first-degree relatives with melanoma
- On immunosuppressive therapy after organ transplantation
- More than 100 nevi
- Radiation therapy for cancer as a child



Management

- Total body skin examination by dermatologist or trained health care provider on yearly basis
- Counsel about skin self-examination and skin cancer prevention

About 1 in 10 individuals with a personal diagnosis of melanoma will have a family history of melanoma. This history could be attributed to similar exposures, skin type etc. and/or an underlying genetic etiology. Individuals are at **increased risk** to carry a (likely) pathogenic variant in a melanoma gene (or another hereditary cancer gene) when there is a personal history of:

- Multiple melanomas (≥ 3)
- Melanoma and a family history of melanoma and/or pancreas cancer
- Melanoma diagnosed at a young age (<40y) and a family history of melanoma and/or pancreas cancer
- Uveal melanoma



Management

Consider referral for genetic assessment and possible genetic testing.

References

Wernli KJ, Henrikson NB, Morrison CC, Nguyen M, Pocobelli G, Blasi PR. Screening for skin cancer in adults updated evidence report and systematic review for the US Preventive Services Task Force. (2016).

JAMA. 316(4):436-447. Retrieved from: <https://jamanetwork.com/journals/jama/fullarticle/2536642>

Resource

[Your local genetics expert](#)

[MiiSkin App](#)

[Get Skin Help.com](#)

[National Comprehensive Cancer Network Melanoma Patient Guide](#)