British Association of Dermatologists

PRESS RELEASE

Having moles on your skin can quadruple your risk of developing the deadliest type of skin cancer, according to a study due to be presented at the World Congress on Cancers of the Skin in Edinburgh, Scotland.

'Melanocytic naevi' are more commonly known as 'moles'. The word 'melanocytic' means that they are made up of the cells, melanocytes, which produce the dark pigment, melanin,that gives the skin its colour. Melanocytes clustered together form naevi. In other words, moles are generally harmless groups of melanocytes. However, the deadliest type of skin cancer, called melanoma, is linked to moles, and approximately half of melanomas develop in pre-existing moles.

This study, from the University of Oxford, UK, and Epworth Hospital in Melbourne, Australia, sought to establish the level of melanoma risk caused by having moles. The researchers compared the medical records of two groups of people – 271,656 for whom moles had been recorded during a hospital visit for any condition, and 10,130,417 people who did not have moles recorded. Anyone who had been diagnosed with melanoma, either previously or at the time the moles were recorded, was excluded from the study.

Comparison of the two cohorts revealed that overall; the group with moles were approximately 4.6 times more likely to develop melanoma than the group with no recorded moles. Significant risk increases were present when moles and subsequent melanoma occurred at the same site on the body, as well as when they occurred at different sites. For example, moles on the trunk were associated with an increased risk of both melanoma on the trunk and melanoma elsewhere. However the increase was greater when the mole was at the same site as the melanoma – people with moles on their trunk were nine times more likely to develop melanoma on the trunk, and 5.6 times more likely to develop melanoma elsewhere on the body.

Study author Dr Eugene Ong, of the Nuffield Department of Population Health, University of Oxford, said: "Our results show that patients with a hospital diagnosis of melanocytic naevi, or moles, have a high risk of developing melanoma both around the site of the mole and elsewhere on the body. These people might, therefore, benefit from increased surveillance.

"Unfortunately we were unable to distinguish between different types of moles or to ascertain the number of moles in each patient. Our patients were in hospital or in day-case care when their moles were recorded, and so the patients in our cohort are likely to have presented with unusual appearances in the moles, in order for them to have warranted recording. A mole or moles were the principal reason for hospital contact for 91 per cent of patients in that cohort. So while this study does not suggest that everyone with a single mole is far more likely to develop melanoma, it does illustrate the link between moles and skin cancer. This is why it is vital people check their moles regularly and report any changes to their doctor."

Nina Goad of the British Association of Dermatologists said: "When melanoma develops in a pre-existing mole, there is usually an area of colour change, and it is the distinction in colour from the remainder of the mole that is a clue that it might be harmful. Or the mole might be changing in another way, such as growing. If a mole changes in size, shape or colour, or a new mole develops in an adult, then it is best to see your GP."

Melanoma is the least common but most serious type of skin cancer. In the UK, 6,853 new cases were diagnosed in women and 6,495 in men in 2012. Over the last 30 years, incidence rates of melanoma in Britain have increased more rapidly than any of the top ten cancers in both men and women, and there is no sign of plateauing. Prevalence in men increased around five-fold while in women, rates more than tripled between 1980 and 2009.*

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Notes to editors:

More information on melanoma and skin cancers can be found at **http://www.bad.org.uk/for-the-public/skin-cancer**

*British Association of Dermatologists, Cancer Research UK, Doctors.net.uk: Skin cancer Recognition Toolkit.

If using this study, please ensure you mention that the study was released at the World Congress on Cancers of the Skin.

The conference will be held in Edinburgh from September 3rd to 6th 2014, and is attended by approximately 1,000 UK and worldwide health professionals.

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Study details:

Risk of subsequent malignant melanoma in patients with melanocytic naevus in England: a national record-linkage study; Eugene Ong[1], Raph Goldacre[1], Rodney Sinclair[2], Michael Goldacre[1]

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High numbers of melanocytic naevi (MN) or dysplastic (atypical) MN have consistently been shown to be important and strong risk factors for the development of melanoma. We aimed to further characterize the risk of melanoma in those with a melanocytic naevus, using linked hospital and mortality records covering the whole population of England from 1999 to 2011. We constructed two cohorts: one that comprised people with a hospital or day-case record of MN (271,656 people) and a control cohort comprising people without (10,130,417 people). Anyone with a melanoma on the same record as MN, or one prior to it, was not admitted to either cohort. We "followed up" these two cohorts to determine observed and expected numbers of people in each cohort diagnosed with subsequent melanoma and calculated rate ratios (RR), based on person-years at risk, standardized by age, sex, year of first admission, Region, and quintile of socio-economic deprivation score. We excluded people diagnosed with melanoma within 1 year of cohort entry to reduce any biasing effects of misdiagnosis. Comparing the MN cohort relative to the non-MN cohort, the overall RR was 4.68 (95% CI 4.39-4.98). RRs were significantly high across all age groups (<25 year olds RR 3.79 (2.82-5.03); 25-59 year olds RR 5.02 (4.62-5.45); 60+ year olds RR 4.68 (4.19-5.21)). Significantly increased RRs were found for both males (RR 5.92, 5.36-6.53) and females (RR 4.13, 3.81-4.48). We found RRs to be increased across all anatomical sites. Significant increases were present when MN and subsequent melanoma occurred at the same site as well as when they occurred at different sites. RRs were consistently higher when considering same-site associations. For example, MN on the trunk was associated with an increased risk of both melanoma on the trunk (RR 8.99, 95% CI 7.69-10.46) and melanoma elsewhere (RR 5.66, 4.97-6.42). We were unable to distinguish between different types of MN or to ascertain the number of MN in each patient. Our patients were in hospital or in day-case care when MN was recorded, and so the patients in our cohort are likely to have presented with atypical MN appearances. MN was the "principal" reason for hospital contact for 91% of patients in the MN cohort. Our results show that patients with a hospital diagnosis of MN have a high risk of developing melanoma both around the MN site and elsewhere in the body, and might, therefore, benefit from increased surveillance.

About the BAD

The British Association of Dermatologists (BAD) is the central association of practising UK dermatologists. Our aim is to continually improve the treatment and understanding of skin disease. The BAD provides free patient information on skin diseases and runs a number of high profile campaigns, including Sun Awareness, which runs from May to September annually and includes national Sun Awareness Week in May. Website: www.bad.org.uk/sunawareness