Smaller surgical procedure sufficient for high-risk melanoma

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(Medical Xpress) -- A smaller surgical procedure is fully sufficient to treat patients with the more hazardous form of malignant melanoma of the skin. This according to a major international multicentre study, coordinated at Karolinska Institutet in Sweden, which is now published in the prestigious scientific journal The Lancet. A smaller surgical procedure spares the patient undue suffering, gives better cosmetic results without compromising safety, and the results showed the same survival patterns as for the patients undergoing the conventional larger operation.

The skin cancer malignant melanoma is one of the most common forms of cancer in Sweden and is the fastest growing in Sweden and other countries with largely fair-skinned populations. Almost all patients with melanoma have the tumour surgically removed. In the past 20 years, several reports have shown that a smaller operation is adequate for low-risk melanoma, but for patients with the high-risk form, there has been much uncertainty about the best surgical treatment to provide with regards how much skin to remove from around the tumour border as part of the first-line treatment.

"In the 1990s, the usual procedure was to operate on these patients with a 4 centimetre margin, and traditionally patients with malignant melanoma have been treated with an even larger resection margin, which has led to poor cosmetic results, longer hospitalisation and undue suffering, without any improvement to the survival rate of this patient group," says Dr Peter Gillgren, researcher at Karolinska Institutet and surgeon at Stockholm South General Hospital.

A total of 936 patients with high-risk melanoma were included in the study. Each patient was randomly assigned an operation using a margin of 2 cm (465 patients) or 4 cm (471 patients), and remained in this group regardless of subsequent developments. The primary aim of the study was to compare survival rates between the groups, but the time without recurrence of the melanoma and rates of recurrences in the scar was also recorded. The study, which was conducted between 1992 and 2004, was a multicentre study and had a longer follow-up time than previous studies.

"The study shows that it's of no higher risk to operate on patients with high-risk melanoma with a 2 cm skin margin in healthy skin as compared to a 4 cm margin," says Dr Gillgren. "What we've shown is that there's no difference in survival between the groups, and at a five-year check-up, 65 per cent of the patients were alive in both groups."

Nor was any difference in recurrence free survival demonstrated between the groups, with 55 per cent of the patients in both groups showing no signs of recurrence after five years. Furthermore, there was no difference in survival between the Swedish subgroup of patients; the advantage of this subsidiary analysis was that these patients' survival rates could be followed for 11.8 years, as compared with 6.7 years in the main patient group. The study included a total of 644 patients from Sweden, 180 from Denmark, 80 from Estonia and 32 from Norway. A small proportion - 3 per cent of the total number of patients - had a melanoma recurrence in the scar: 20 in the 2 cm group and nine in the 4 cm group, but this difference was not statistically significant.

"Malignant melanoma is one of the fastest-growing forms of cancer in our country. It is important to draw up guidelines for coordinated therapy and follow the results of treatment," says Dr Gillgren. "The most recent international guidelines are to operate on this patient group with a 2-3 cm margin, although this recommendation is based on somewhat scarce evidence. This uncertainty is now less as our study demonstrates that a margin of 2 cm is just as safe as one of 4 cm."

More information: "A randomised multicentre trial comparing 2-cm vs. 4-cm surgical excision margins

for primary cutaneous melanoma thicker than 2mm
The Lancet online 24 October 2011.
www.thelancet.com/journals/lan …
1%2961546-8/abstract

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