

Prospective Study of Melanoma in the Paris Region in 2004

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INTRODUCTION

Melanoma remains an important public health problem because of its increasing incidence and its responsibility for the deaths of young individuals. A first study was carried out by the PETRI association in 1994 to estimate the incidence of melanoma in the Paris region. A second one was carried out in 2004, with the same methodology, to estimate the increase of melanoma incidence in the Paris region and the main clinical and histological characteristics of these cancers, comparing to 1994 data.

METHODOLOGY

Every pathologist of the region has been contacted to fill a questionnaire for each primary cutaneous melanoma excised between January 1st and December 31st 2004, from patients living in the Paris region (departments 75, 77, 91, 92, 93, 94, 95). The information requested included melanoma characteristics (localisation, type, Breslow's thickness, Clark level, regression signs, pre-existence of a nevus) and demographic data (age, sex, zip code of residence).

RESULTS

98 % of pathologists in the region agree to participate in the study. They send 1453 questionnaires, among them 160 were excluded (double, non cutaneous melanoma, secondary lesion, non resident in the region, diagnoses out of the inclusion dates, biopsy followed by exeresis ...). The analyse included 1293 lesions in 1269 patients. More than 2/3 of diagnoses were confirmed by 2 laboratories and 10 laboratories (on 98) reported 86 % of the diagnoses.

INCIDENCE

The crude incidence of melanoma in the Paris region during 2004 was 11.4 cases per 100 000 inhabitants, by sex: 11.1 per 100 000 males and 12.4 cases per 100 000 females. The sex ratio men/women was 0.82.

The crude incidence of invasive melanoma (Clark 2 to 5) was 8,9 cases per 100 000 inhabitants, 9,2 per 100 000 women and 8,6 per 100 000 men, with a sex ratio men/women of 0,93.

DEMOGRAPHIC CHARACTERISTICS

Melanoma diagnosis was more often in women (54.9 %) than in men (45.1 %). The patient's mean age was 59.3 years (SD: 17.3). The mean age according to sex was different (p=0.02). It was 58.2 years (SD: 18.0) for women and 60.6

years (SD: 16.4) for men. Two diagnoses were done in children (≤ 15 years old).

CLINICAL CHARACTERISTICS

The proportion of in situ melanoma was higher among women (23.6%) than among men (18.6%) $p=0.03$.

The site was known for 1258 cases: 30.0% were on the trunk, 24.5% on the legs (excluding the feet), 12.8% on the arms (excluding the hands), 5.0% on the feet, 0.5% on the hands, 0.3% on the nails (hands and feet), 0.1% on the extern.

Most frequently localisations are legs and arms for women (46 % of lesions), trunk for men (42 % of lesions), face and neck for both men and women (21 % of lesions).

The type distribution of lesions was : 72 % superficial spreading melanoma (SSM); 9 % nodular melanoma and 13 % invasive melanoma arising on melanosis of Dubreuilh (Tables 1).

Clark levels distribution was as follow : 21 % level 1 ; 28 % level 2 ; 23 % level 3 ; 23 % level 4 and 5 % level 5. Men had more often a level 4 or 5 than women (34 % vs. 23 %). Mean Breslow thickness was 1.73 mm (max 38 mm), higher in men than in women (2,02 vs. 1,46). Around 52 % of lesions was ≤ 0.75 mm and 21 % more was > 0.75 and ≤ 1.5 mm.

COMPARISON 1994-2004

The incidence of melanoma in the Paris region increases slowly in 10 years: from 9.9 per 100 000 in 1994 to 11.4 cases per 100 000 inhabitants in 2004 for all melanomas and from 8.6 to 8.9 for invasive melanomas. But it is a crude incidence, more analysis are needed to study the population ageing. In this region, the increase was not multiplied by two in these ten years as it was in the past.

Median age increases more than 10 years for each sex from 1994 to 2004 : 49 years to 61 for men; 44 years to 58 for women.

Clinical characteristics change in 10 years, with increase of melanoma arising on melanosis of Dubreuilh and nodular melanomas, and a decrease of SSM. Sites of melanoma change with more face and neck localisation (from 10 to 21 %) and less trunk localisation (from 37% to 30%) and legs localisation (from 32 % to 24%). Melanoma are more often diagnosed at in situ stage but they are also more frequently diagnoseds at a advanced stage (Table 2).

BIBLIOGRAPHY

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Table 1 - Type distribution of the lesions per sex

	Females (n=706) %	Males (n=582) %	All (n=1293) %
<i>Superficial spreading melanomas (SSM)</i>	73.1	71.0	72.1
<i>Nodular melanomas</i>	7.5	11.7	9.4
<i>Melanomias of Dubreuilh</i>	14.2	12.5	13.5
<i>Acrolentiginous melanomas</i>	2.1	1.2	1.7
<i>Unclassable</i>	2.6	2.4	2.5

Table 2 - Clinical characteristics

	1994 %	2004 %
Type distribution of the lesions		
<i>Superficial spreading melanomas (SSM)</i>	83.0	72.1
<i>Nodular melanomas</i>	7.6	9.4
<i>Melanomias of Dubreuilh</i>	2.6	1.7
<i>Acrolentiginous melanomas</i>	4.2	13.5
<i>Unclassable</i>	2.6	4.2
Localisation		
<i>Trunk</i>	37.1	30.0
<i>Legs (excluding the feet)</i>	31.8	24.5
<i>Feet</i>	6.2	5.0
<i>Arms (excluding the hands)</i>	12.1	12.8
<i>Hands</i>	0.5	0.5
<i>Nail (hands and feet)</i>	0.6	0.3
<i>Face and neck</i>	10.1	21.3
<i>Other</i>	1.6	5.6
Clark		
<i>I (in situ)</i>	12.7	21.3
<i>II</i>	48.5	27.8
<i>III</i>	22.7	22.7
<i>IV</i>	14.0	23.1
<i>V</i>	2.1	5.0