Available online at www.sciencedirect.com

ScienceDirect

EJSO 40 (2014) 1276–1283

EJSO the Journal of Cancer Surgery

www.ejso.com

Cutaneous melanoma: Medical specialists' opinions on follow-up and sentinel lymph node biopsy

K.P. Wevers [a], J.E.H.M. Hoekstra-Weebers [b,c], M.J. Speijers [a], W. Bergman [e], N.A. Gruis [d], H.J. Hoekstra [a,*]

[a] *Division of Surgical Oncology, University of Groningen, University Medical Center Groningen, The Netherlands*

[b] *Wenckebach Institute, University of Groningen, University Medical Center Groningen, The Netherlands*

[c] *Comprehensive Cancer Center Netherlands, Location Groningen, The Netherlands*

[d] *Stichting Melanoom, Dutch Melanoma Patient Foundation, Purmerend, The Netherlands*

[e] *Department of Dermatology, Leiden University Medical Center, Leiden, The Netherlands*

Accepted 21 February 2014

Available online 4 March 2014

Abstract

Background: The purpose, frequency and content of follow-up (FU) visits have been widely debated for all common malignancies, including melanoma. The aim was to gain insight into Dutch medical specialists' opinions on melanoma FU and to assess their views on sentinel lymph node biopsy (SLNB).

Methods: All members of the Dutch Society of Surgical Oncology and the Dutch Society of Dermatology and Venereology were invited to complete a web-based questionnaire, consisting of 25 questions addressing the following topics: 1) respondent characteristics, 2) knowledge of national melanoma guideline, 3) opinions on melanoma FU, and 4) view on the significance of SLNB.

Results: A total of 378 respondents (response = 37%) started the survey, including 173 surgeons (46%) and 205 dermatologists (54%). Of these, 97% and 92% agreed that the purpose of FU is detection of local recurrence and second primary, respectively. Concerning frequency of FU in the first 10 years after diagnosis, 42% preferred a less frequent FU than indicated by the current guideline, while 4% preferred more frequent FU. Overall, twenty-five percent agreed that the standard diagnostics of cutaneous melanoma should include a SLNB, the percentage was highest amongst surgical residents (44%).

Conclusion: The majority of specialists consider melanoma FU to be primarily an instrument to detect recurrences and secondary primaries. The frequency of FU, as prescribed by the current guideline, could be reduced according to 42%. The importance of SLNB seems to be insufficiently addressed in the Dutch guideline and by Dutch medical specialists despite its role in the AJCC staging system.

Keywords: Melanoma; Follow-up; Sentinel node; Professionals; Survey; Questionnaire

Introduction

As the number of patients with cancer continues to increase, medical specialists are striving to optimize treatment and follow-up (FU). Among various types of cancer, melanoma has one of the fastest increasing incidence rates in the western world. In the Netherlands the incidence of melanoma doubled in the past two decades, from 11.3 per 100 000 in 1989 to 26.3 per 100 000 in 2009.[1] In the United States, it is estimated that over 70 000 people will be diagnosed with melanoma in 2012.[2]

The purpose, frequency, and content of follow-up visits have been widely debated for all common malignancies, including melanoma. To date, high frequency FU, including up to four hospital visits per year, is recommended by national guidelines in countries with the highest melanoma incidence.[3] While medical specialists' opinions on the purpose and effectiveness of FU have been investigated for other malignancies, such as colon and breast cancer,[4,5] views on FU for melanoma remain unknown.

The aim of this study was to examine Dutch medical specialists' knowledge of the national melanoma guideline and

* Corresponding author. Division of Surgical Oncology, University Medical Center Groningen, P.O. Box 30.001, 9700 RB Groningen, The Netherlands. Tel.: +31 (0) 50 361 23 17; fax: +31 (0) 50 361 48 73.

E-mail address: h.j.hoekstra@umcg.nl (H.J. Hoekstra).

0748-7983/$ - see front matter © 2014 Elsevier Ltd. All rights reserved.

http://dx.doi.org/10.1016/j.ejso.2014.02.240

to gain insight into their opinions on the purpose, frequency, and organization of FU in melanoma patients through a web-based survey. Additionally, respondents' views on sentinel lymph node biopsy (SLNB) were assessed.

Methods

Procedure and respondents

An e-mail explaining the goal of the study, an invitation to participate, and a hyperlink to the questionnaire was sent by the investigators to all members of the Dutch Society of Surgical Oncology ($n = 435$ surgeons) and the Dutch Society of Dermatology and Venereology ($n = 600$ dermatologists). A reminder email was sent after four weeks. Respondents completed questionnaires anonymously.

Instrument

A 25-question, web-based questionnaire was created using www.surveymonkey.com. In the present article we address the questions dealing with the following four subjects: 1) characteristics of respondent (five questions), 2) knowledge and adherence to the current Dutch melanoma guideline (three questions), 3) opinions on FU, including purpose, frequency and duration, and organization (seven questions, with accompanying subquestions), and 4) respondents' opinions on the guideline's recommendations for SLNB (three questions).

Questions on subjects one through three were derived from the questionnaire on medical specialists' attitude on FU in breast cancer patients and modified to fit incidence and disease characteristics of malignant cutaneous melanoma.[4]

Current national guideline

The Dutch melanoma skin cancer guideline, published in 2005, recommends a single FU visit for melanomas thinner than 1 mm according to Breslow.[6] For melanomas between 1 mm and 2 mm, the FU schedule after diagnosis consist of four visits during the first year, three visits during the second year, and two visits per annum up to the fifth year. Patients with a melanoma thicker than 2 mm are additionally evaluated annually during years 6–10 after diagnosis.

Regarding the SLNB, the 2005 Dutch melanoma guideline states that this procedure is not part of standard diagnostics of cutaneous melanoma and that the procedure has to be reserved for patients who want to be optimally informed about the stage of their disease.

Statistical analysis

Frequencies and percentages were calculated. Differences between groups were analyzed using chi-square tests with a significance level of 5%. Figures were made using GraphPad Prism 5.00. Statistical analysis was performed using the SPSS software package (SPSS 18.0, Chicago, Illinois, USA).

Results

Respondents' characteristics

A total of 378 respondents (response rate = 37%) started the survey, including 173 surgical (46%) and 205 dermatological (54%) medical specialists (Table 1). Of these, 352 respondents (93%) completed the questionnaire. Table 1 shows that respondents were from all types of hospitals with almost half working in a district training hospital. Twenty-eight percent of respondents (39% of surgeons and 19% of dermatologists, $p < 0.001$) indicated that fewer than 30 new melanoma patients were diagnosed and treated in their hospital annually. Eighty-nine percent of medical specialists themselves (88% of surgeons and 90% of dermatologists, $p = 0.559$) treated fewer than 30 new melanoma patients annually.

Current guideline

All but one of the medical specialists (99.7%) indicated they knew the content of the national melanoma skin cancer

Table 1
Characteristics of 378 respondents.

Total $n = 378$	n	%
Discipline		
Surgical oncologist	124	32.8
Surgeon	33	8.7
Surgical resident	16	4.2
Dermatologist	175	46.3
Dermatological resident	30	7.9
Type Hospital		
University Hospital	84	22.2
District training hospital	173	45.8
District non-training hospital	106	28.0
Private clinic	15	4.0
New patients per year in hospital		
0–10	14	3.7
11–20	39	10.3
21–30	52	13.8
31–40	45	11.9
41–50	39	10.3
>50	123	32.5
Unknown	66	17.5
New patients per year for specialist		
0–10	125	33.1
11–20	161	42.6
21–30	50	13.2
31–40	17	4.5
41–50	9	2.4
>50	7	1.9
Unknown	9	2.4
Follow-up contacts per week for specialist		
<1	119	31.5
1–2	143	37.8
3–5	85	22.5
6–10	21	5.6
>10	10	2.6