



Huidexcisies door de huisarts: patholoog of prullebak?

Prof. Dr. Paul J van Diest
Hoofd afdeling Pathologie
UMCU

Stemvraag 1

Alle huidjes die de huisarts verwijdert moeten ingestuurd worden voor pathologie onderzoek

- ja
- nee



Stemvraag 2

Ik stuur alle huidje die ik verwijder in voor pathologie onderzoek

- ja
- nee



Stemvraag 3

Huidjes die ik zeker benigne inschat zijn bij pathologie onderzoek nooit maligne

- ja
- nee



Introduction

- Most GPs do not submit all skin excisions for histopathological examination (UK: 60%)
- Dutch study in Harderwijk region, 5 GPs:
 - 329/527 (62%) submission after “small surgical procedure” (KCV) for “benign tumor”, “cyst”, “wart”, “nevus”



Kritische blik na het kleine snijden

P.A.J. Buis, huisarts-onderzoeker, samenwerkingsverband De Artsenij, Harderwijk

prof. dr. P.J. van Dieët, afdeling Pathologie, Universitair Medisch Centrum Utrecht

Correspondentieadres:
pajbuis.huisarts@planet.nl;
c.o.: redactie@medischcontact.nl

Geen belangenverstrengeling gemeld.

Onder een benigne klinische diagnose van de huisarts gaat relatief vaak een maligniteit schuil. Na huidexcisies is het dus wijs om materiaal in te sturen voor pathologieonderzoek. Maar de mate waarin huisartsen dat doen, verschilt sterk, zo blijkt uit onderzoek bij vijf huisartsenpraktijken in Harderwijk.

Pathologieonderzoek: wel of niet?

	totaalaantal kleine chirurgische verrichtingen in 5 huisartsenpraktijken	verschil tussen 5 praktijken in absolute aantal verrichtingen	aantal malen (en %) dat vervolgens pathologieonderzoek plaatsvond	verschil in gebruik van pathologieonderzoek tussen 5 praktijken
benigne tumoren	159	11 tot 58	72 (45%)	27 tot 72%
cystes	98	6 tot 35	29 (29%)	0 tot 65%
wratten	84	5 tot 23	57 (68%)	43 tot 93%
naevi	186	18 tot 72	171 (92%)	79 tot 100%

Aantallen kleine chirurgische verrichtingen uit de diagnosegroepen 'benigne tumor', 'cyste', 'wrat' en 'naevus' en de mate waarin huisartsen uit vijf praktijken in Harderwijk daarna pathologieonderzoek lieten verrichten. Ook de mate waarin de praktijken hierop verschilden, is weergegeven.



Introduction

- GPs rely on clinical assessment of benign nature
- clinical diagnoses may not be accurate
- literature: 30% discrepancies between clinical GP diagnoses and histopathology



Introduction

Should GPs submit all skin excisions for histopathology to catch all malignancies?

- primary incomplete excision of malignancy may result in untreatable or metastasized recurrences
- some malignancies require additional treatment besides local excision (SNB, chemotherapy)
- histopathology is not expensive



First study: how many malignancies?

- 4595 skin excisions by GPs from SALTRO practice (1999-2000)
- Clinical diagnosis as written on request form
- Clinical dignity: benign, premalignant, malignant
- Final histopathological diagnosis (benign, premalignant, malignant)
- Relation to age (< 40, > 40)

Buis et al, Br J Gen Practice 2005;55:458-460

GP skin excisions: clinical vs histopathological diagnosis

		Final histopathological diagnosis		
		Benign	(Pre)malignant	Total
Clinical diagnosis	Benign	4302 (97%)	134 (3%)	4436
	(Pre)malignant	78 (49%)	81 (51%)	159
	Total	4380 (95%)	215 (5%)	4595

Buis et al, Br J Gen Practice 2005;55:458-460



GP skin excisions: clinical vs histopathological diagnosis

- sensitivity for a malignant diagnosis was 38% (81/215)
- specificity 98% (4302/4380)
- age: <40: 0.9% (pre)malignancies
>40: 9.2% (pre)malignancies

Buis et al, Br J Gen Practice 2005;55:458-460

GP skin excisions: type of (pre)malignancies

	Frequency	Percentage
Adenocarcinoma	1	0.5
Basal cell carcinoma	100	46.5
Dysplastic nevus	1	0.5
Fibrosarcoma	1	0.5
Atypical fibroxanthoma	1	0.5
Hemangioendothelioma	2	0.9
Hydroacanthoma	1	0.5
Actinic keratosis	41	19.1
Leiomyosarcoma	1	0.5
Lymphoma	2	0.9
Bowens disease	12	5.6
Melanoma	26	12.1
Squamous cell cancer	26	12.1
Total	215	100.0



GP skin excisions: (pre)malignancies <40

	Frequency	Percentage
Basal cell carcinoma	11	39.3
Dysplastic nevus	1	3.6
Sarcoma	3	10.8
Dysplastic hyperkeratotic papilloma	1	3.6
Actinic keratosis	1	3.6
Melanoma	11	39.3
Total	28	100.0

NB: none of these were clinically malignant!!

GP skin excisions: (pre)malignancies vs type of clinical diagnosis

- Epidermal/trichilemmal cyst: 3% malignancies
- Seborrhoidic keratosis: 4% (pre)malignancies
- Nevus: 2% (pre)malignancies
- Verrucous wart: 6% (pre)malignancies
- Fibroma: 2% (pre)malignancies

GP skin excisions: (pre)malignancies in cases without clinical diagnosis

	Frequency	Percentage
Benign	441	90.3
Premalignant	12	2.5
Malignant	35	7.2
Total	488	100.0

Buis et al, Br J Gen Practice 2005;55:458-460



GP skin excisions: discussion

- Biased study?
- Cost effectiveness
 - 4595 x pathology for 215 (pre)malignancies
 - 4595x30 euro = 137850
 - 641 euro per malignancy
 - cervical screening: $800,000 \times 18 / 800 = 18,000$ euro per malignancy



GP subcutis excisions from same series

Table 2: Final histological diagnosis of 90 subcutis excisions by general practitioners

	Frequency	Percentage
<i>Benign</i>		
Dermatofibroma	1	1.1
Digital mucinous cyst	1	1.1
Epidermal cyst	9	10
Median raphe cyst	1	1.1
Neurofibroma	2	2.2
Trichilemmal cyst	12	13.3
Ganglion	1	1.1
Hemangioma	1	1.1
Hydrocystoma	1	1.1
Leiomyoma	4	4.4
Lipoma	47	52.2
Lymph node	1	1.1
Panniculitis	2	2.2
Pilomatricoma	2	2.2
Giant cell tumor	2	2.2
Schwannoma	1	1.1
<i>Malignant</i>		
Dermatofibrosarcoma protuberans	1	1.1
Merkel cell carcinoma	1	1.1
Total	90	100.0

Both malignancies (2%)
were clinically benign

All subcutis excisions by
GPs should be
referred for
histopathological
investigation!

GP skin excisions: the garbage bin

Level of certainty of clinical diagnosis	Final pathology diagnosis % (n)		
	Benign	Premalignant	Malignant
100% benign	98.5	0.1 (1)	1.4 (10)
Probably benign	94	2.3 (53)	3.7 (84)
Uncertain	73.6	9.7 (36)	16.7 (62)
Probably malignant	47.1	11.8 (18)	41.2 (63)
100% malignant	32.1	3.6 (1)	64.3 (18)
Total	(3228)	(109)	(237)

- 1.5% malignancies in garbage bin!



Differences between GP and academic melanomas

GP melanomas

More females	(P<0.0001)
More nodular melanomas	(P<0.0001)
More Clark III	(P<0.0001)
Less often radically removed	(P<0.0001)



Melanoma metastases with unknown primaries

year	females	males
1995	51	73
1996	57	66
1997	77	61
1998	61	70
1999	54	61
2000	66	75
2001	65	80
2002	73	90
2003	78	86
2004	66	82
2005	57	88
2006	68	74
2007	77	99
2008	63	87

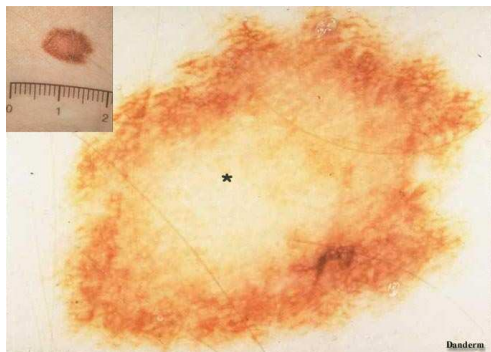
**Source:
PALGA 2009**

Dermatoscopy?



Not likely replacement for pathology
Improves clinical diagnosis

Identifies better lesions that can be
safely removed by GPs

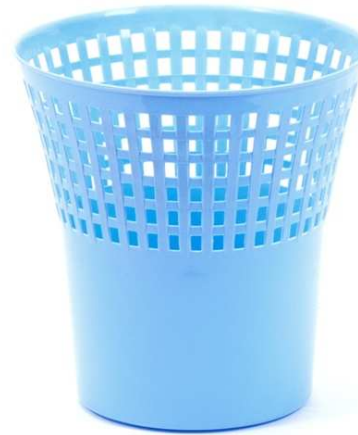


Universitair Medisch Centrum
Utrecht
Julius Centrum

<http://www.danderm-pdv.is.kkh.dk/derma/section1/index.html>

Utrecht **PAO-H**
NASCHOLING VOOR HUISARTSEN
GEACCREDITEERD

For the time being....



GP skin excisions: conclusions

- Histopathology of GP skin excisions yields high proportion (5%) of unexpected and often serious (pre)malignancies
- Frequency of (pre)malignancies is age dependent
- Occurs over all clinical diagnosis categories including cyst, nevus, wart and fibroma
- Pathology of GP skin excisions is cost effective
- All skin excisions by GPs should be referred for histopathological investigation



Acknowledgements

General Practice H de Manstraat, Harderwijk

Pieter Buis, GP



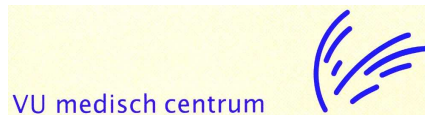
GP Lab



Wim Verweij, general director

Rob Chorus, former medical director

Bernard Freijink, medical director



Folkert van Kemenade, pathologist

Stemvraag 4

Alle huidjes die de huisarts verwijdert moeten ingestuurd worden voor pathologie onderzoek

- ja
- nee

