

# Evidence for Mohs surgery

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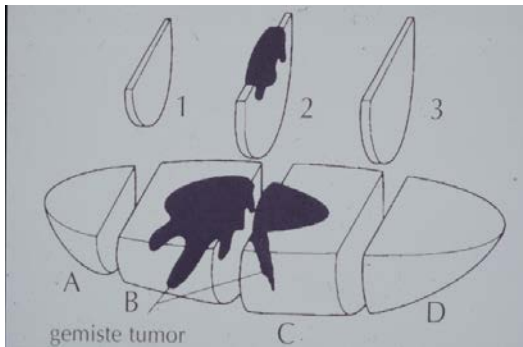
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ESMS MOHS SURGERY COURSE, 25-26 November 2016

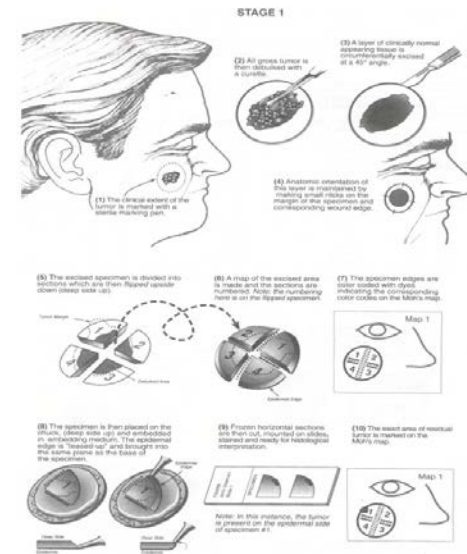
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# Excision



- × 3-5 mm clinical margin
- × 0,1% margin control  
(Abide, The meaning of surgical margins. Plast Reconstr Surg. 1984)

# Mohs



- × clinical margin
- × “100% margin control”

“A chance to cut is a chance to check all peripheral margins” (Siegel,2004)

# Standard Excision

- × Risk of positive margins for pBCC < =1cm
  - × 30% at 2 mm
  - × 16% at 3 mm
  - × 5% at 5 mm
- × Risk of positive margins for infiltrative pBCC 1-2 cm
  - × 48% at 2mm
  - × 34% at 3mm
  - × 18% at 5 mm

Breuninger et al. J Dermatol Surg Oncol 1991

# RR % for recurrence

Therapy	pBCC	rBCC
Surgery	10.1	17.4
Radiotherapy	8.7	9.8
Cryosurgery	7.5	-
Curettage.& electrodissec	7.7	40
Mohs	1	5.6

Rowe DE, J Derm Surg Onco 1989 . 2 retrospective studies with >3000 BCC each

1. Long term recurrence rates in primary BCC
2. Mohs surgery is the treatment of choice for recurrent BCC

retrospective  
studies 5yr FU  
RR% Mohs

Auteur	pBCC	rBCC
Tromovitch, 1966		6.9
Sakura, 1979		12.0
Mohs, 1981	0	6.8
Robins, 1985	1.9	6.4
Mohs, 1986	0.6	7.6
Mohs, 1988	1.7	7.8
Julian, 1997	1.7	4.8
Wennberg, 1999	6.5	10.0
Smeets, BJD 2004	3.2	6.7

Tertiary Mohs Centres



# Evidence for BCC

×<sub>1</sub> Randomized study excision vs Mohs

Lancet 2004;364:1766-72 Kelleners-Smeets et al

Lancet Oncology 2008;9:1149-56. 5 year Follow up. Mosterd et al

# Evidence for BCC

- × Primary > 1cm H-zone 25% irradical excisions
- × Recurrent BCC in the face: 30% risk of irradical excision
- × Significantly less recurrences after Mohs
  - for pBCC 4.1% recurrence in SE vs 2.5% in MMS
  - for rBCC 12.1% recurrence in SE vs 2.4% in MMS
- × Larger defects and therefore less cosmetic outcome after incomplete excision and for recurrent BCC

# Evidence for BCC

- van Loo et al. SE vs Mohs 10 year follow-up. Eur J Cancer 2014
- pBCC 12.2% after SE vs 4.4% after Mohs
- rBCC 14% after SE vs 3.9% after Mohs
- Longterm Follow up is needed!



# Evidence for SCC

× SCC : No randomized studies!

Multiprofessional Guidelines for the management of the patient with primary cutaneous squamous cell carcinoma.

Aug 2009 British Association of Dermatologists

× Best cure rates

× Less recurrences and less metastases after Mohs

# Is Mohs safe?

- Reliability Mohs slides viewed by Mohs surgeon vs Pathologist.
- Studies show high interpersonal agreement between mohs surgeons and pathologist on BCC presence: 95-99%

Grabski et al J Am Acad Dermatol 1989

Tan et al Australas J Dermatol 2011

Semkova et al Dermatol Surg 2013

Murphy et al Dermatol Surg 2008

# Reliability interpretation Mohs slides

- van Lee et al. Br J dermatol 2016
- Study in Erasmus MC Rotterdam NL
- prospective study BCC presence, location on the slide, BCC subtype
- 3 Mohs surgeons, 3 pathologists assessed 50 Mohs slides twice with a 2 month interval

# Reliability Interpretation Mohs slides

- Intrapersonal and interpersonal reliability was substantial on BCC presence
- Moderate on BCC subtype
- Discordant diagnosis on BCC presence more frequent when slides were self-scored as difficult

# Reliability Interpretation Mohs slides

- all three mohs surgeons identified BCC positive slides correctly (high sensitivity)
- Mohs surgeons were more likely to interpret benign structures as BCC (lower specificity)
- Pathologists had a lower sensitivity but higher specificity

# European (Mohs) dermato-surgeons

- Certified training centra
- Certified training program
- Work in a Team!
- Promotion of dermato-surgery
- Incorporation in the EADV
- Skin Cancer belongs to DERMATOLOGISTS.

Thank you!

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