

Title

Expanding spectrum of 'spitzoid' lesions: a small series of 4 cases with *MAP2K1* mutations.

Journal

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Authors

K.G.P. Kerckhoffs¹, T. Aallali², C.A. Ambarus³, V. Sigurdsson⁴, A.M.L. Jansen⁵, W.A.M. Blokx⁵

Affiliations

¹ Department of Pathology, Maastricht University Medical Center+, Maastricht, The Netherlands

² Pathology Expert Center, Hoorn/Zaandam, The Netherlands

³ Department of Pathology, Sint Antonius Hospital, Nieuwegein, The Netherlands

⁴ Department of Dermatology, University Medical Center Utrecht, Utrecht, The Netherlands

⁵ Department of Pathology, Division of Laboratories, Pharmacy and Biomedical Genetics, University Medical Center Utrecht, Utrecht, The Netherlands

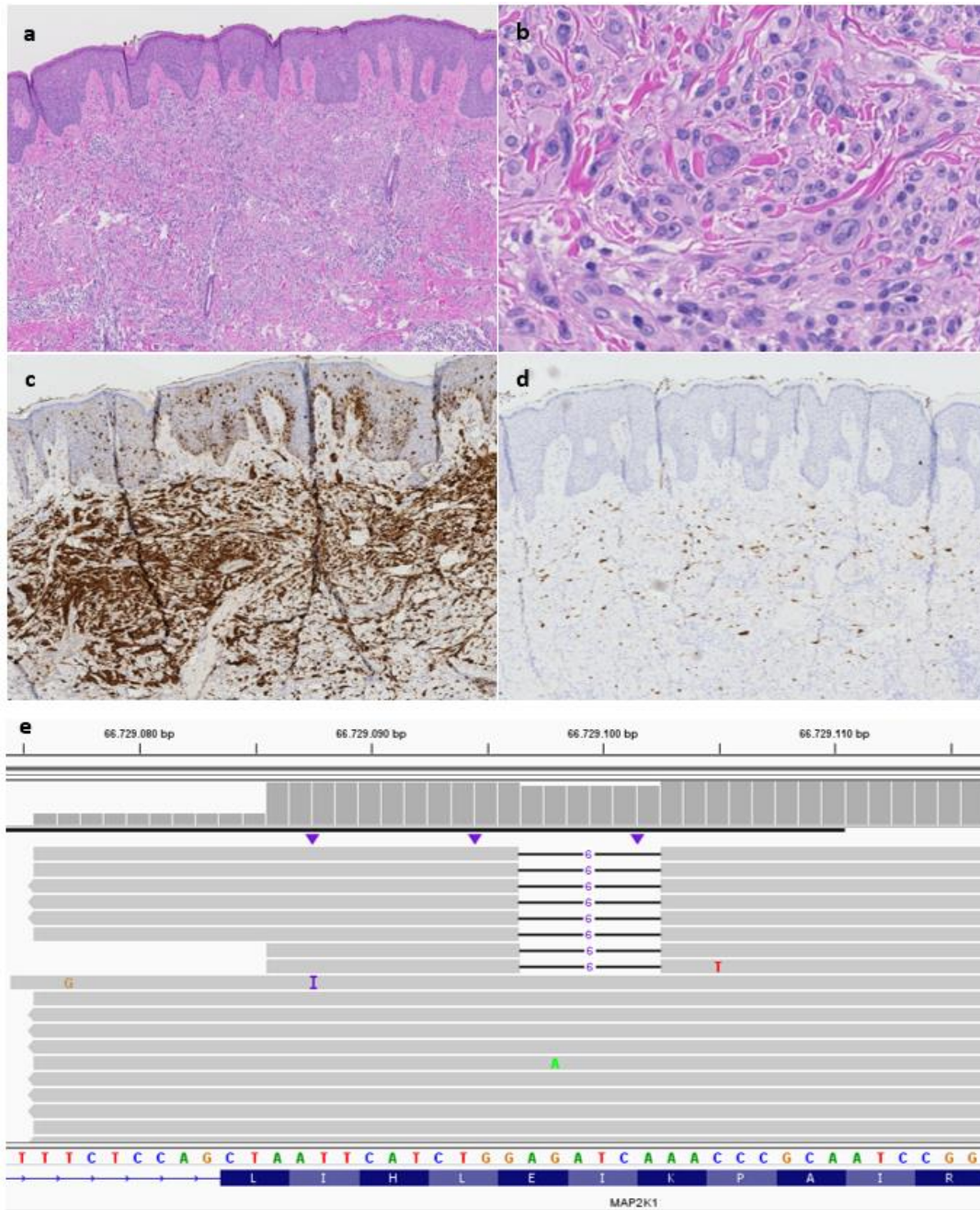
Corresponding author

K.G.P. Kerckhoffs

E-mail: kelly.kerckhoffs@mumc.nl

Online Resource 3

Microscopical and molecular findings case 1



a H&E, x5: symmetrical, slightly wedge-shaped dermal melanocytic proliferation with overlying epidermal hyperplasia.

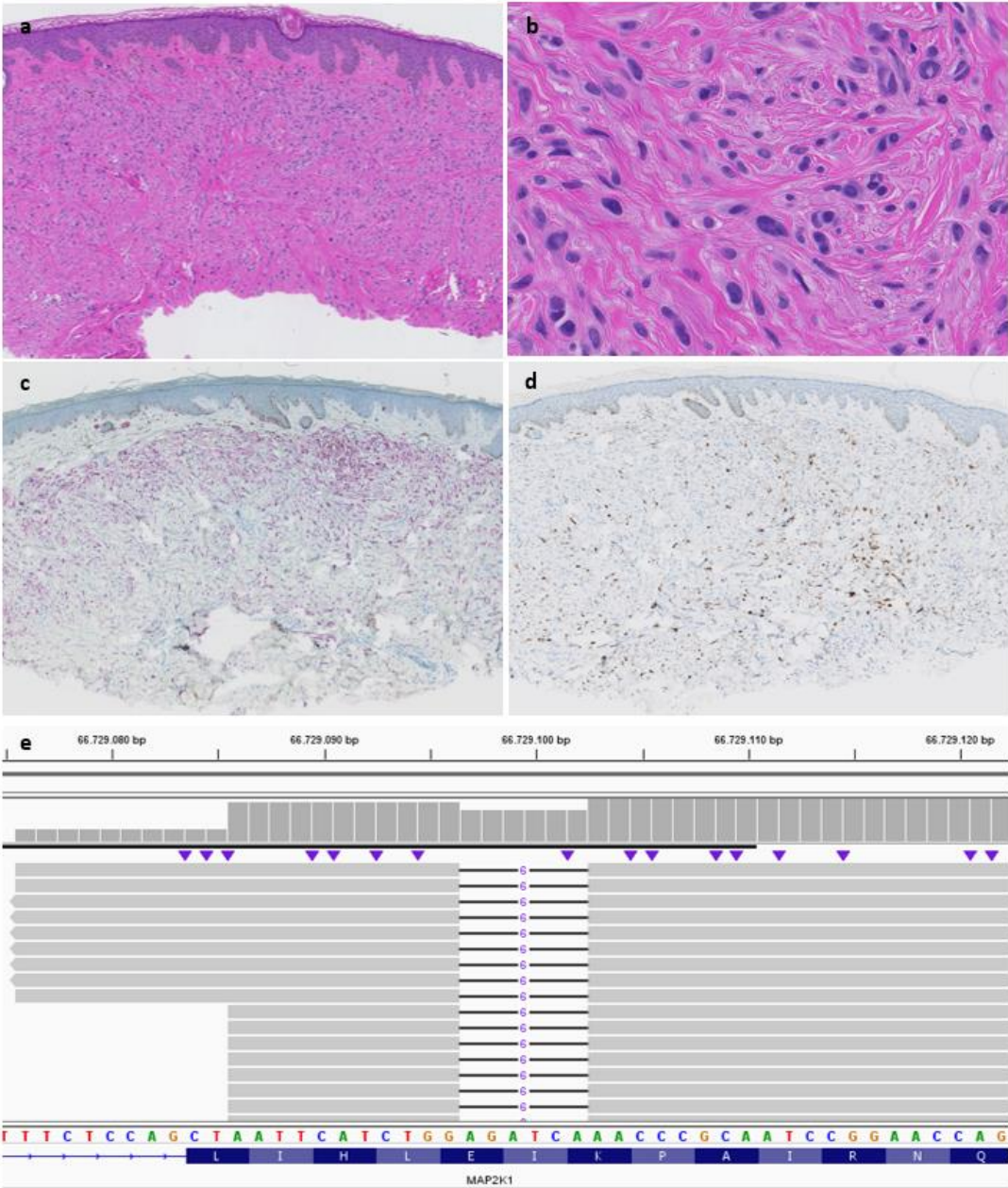
b H&E, x40: epithelioid to spindle-shaped melanocytes with pale, eosinophilic cytoplasm and in deeper sections more atypia with pleomorphism, prominent nucleoli and sometimes presence of nuclear inclusions.

c S100 stain, x5: positive staining.

d p16 stain, x5: few staining cells, but a checkerboard pattern could still be discerned.

e Integrative Genomics Viewer (IGV) visualization of the sequence data containing *MAP2K1* in-frame deletion c.306_311del (p.Ile103_Lys104del) in 13% of the reads (RefSeq NM_002755.3). The black lines indicate the location of the deletion.

Microscopical and molecular findings case 4



a H&E, x5: symmetrical, dermal, slightly wedge-shaped melanocytic proliferation showing maturation towards deeper parts.
b H&E, x40: spindle-shaped melanocytes with pale, eosinophilic cytoplasm.
c Melan A stain, x5: positive staining.
d p16 stain, x5: focal positivity.
e Integrative Genomics Viewer (IGV) visualization of the sequence data containing *MAP2K1* c.306_311del (p.Ile103_Lys104del) in 28% of the reads (RefSeq NM_002755.3). The black lines indicate the location of the deletion.