Berichte der Arbeitsgemeinschaften

Bericht der Sitzung der Arbeitsgemeinschaft Dermatopathologie

Am Donnerstag, den 9. Juni 2022, 16.30–18.30 Uhr im Rahmen der Jahrestagung der DGP, in Münster

E. Bierhoff¹ · D. Metze²
¹ Heinz-Werner-Seifert-Institut für Dermatopathologie, Bonn, Deutschland
² Klinik für Hautkrankheiten, Universitätsklinikum Münster, Münster, Deutschland

Die diesjährige Jahrestagung der Deutschen Gesellschaft für Pathologie in Münster konnte glücklicherweise wieder als Präsenzveranstaltung organisiert und auch durchgeführt werden. Die Sitzung der Arbeitsgemeinschaft wurde in Präsenz mit über 30 Teilnehmern abgehalten.

Die Moderation erfolgte durch Prof. Dieter Metze, Münster, und Prof. Erhard Bierhoff, Bonn.

Folgende Vorträge wurden präsentiert:

M. T. Fernández-Figueras (key note lecture), Skin manifestation of Covid-19. Cap del Servei d’Anatomia Patològica Hospital Universitari General de Catalunya. Grupo Quirón SaludCap de l’Area d’Histologia i Anatomia Patològica Universitat Internacional de Catalunya, Spain

Frau Fernández-Figueras präsentierte eine exzellente und umfassende Darstellung der Hautveränderungen im Zusammenhang mit Covid-19-Infektionen, aber auch im Zusammenhang mit Covid-19-Impfreaktionen. Das Spektrum der möglichen Hautmanifestationen ist sehr breit gestreut. Ein charakteristisches klinisches wie auch dermatopathologisches Reaktionsmuster bei Covid-19-Infektionen oder deren Subtypen ist bisher nicht definiert.

J. L. R. Peralto (key note lecture), Clues to solve problematic melanocytic lesions. Jefe de Servicio Servicio de Anatomía Patológica Hospital Universitario 12 de Octubre Avda. de Córdoba s/n 28041-Madrid, Spain

Herr Peralto zeigte an zahlreichen, ausgefallenen und diagnostisch sehr anspruchsvollen Beispielen melanozytärer Läsionen Wege („clues“) zur Diagnose.

M. Abbas, Histopathological and immunohistochemical study of PRAME expression in different benign, dysplastic and malignant primary and metastatic melanocytic lesions. M. Abbas¹, O. Bettendorf², J. de Jonge³; ¹Uniklinikum Münster, Gerhard-Domagk-Institut für Pathologie, Münster, Germany, ²Institut für Pathologie und Zytologie, Schüttorf, Germany, ³Institut für Pathologie und Zytologie, Pathologie, Schüttorf, Germany

Background. Immunotherapy is a revolutionary strategy for cancer treatment. There is an antibody-based therapy that targets growth-factor receptors such as EGFR, Her2-neu, and CD20. Because of developing resistance, there is immunotherapy using immune checkpoint inhibitors against PDL1 and cytotoxic T-lymphocyte-associated antigen 4 (CTLA-4). Preferentially expressed Antigens in MElanoma (PRAME) is one of the cancer testis antigens (CTAs). Adoptive T-cell therapy is modulated against CTAs with regard to their restricted expression in somatic normal tissues, re-expression in many cancer types, and immunogenic nature. The study attempts to gain insight into the practical use of immunotherapy against PRAME in malignant lesions.
**Methods.** One hundred cases with different subtypes of benign nevi, dysplastic nevi, and primary and metastatic malignant melanoma were examined histopathologically and submitted to immunohistochemical study focussing on PRAME expression. Other markers were added (HMB-45, Melan-A, P16, and Ki67) to ensure the diagnosis and to compare with the PRAME expression. Ten control cases were added including dermatofibroma, atypical fibroxanthoma, and papillary renal cell carcinoma.

**Results.** PRAME expression was positive in all cases of in situ melanoma. It is expressed in 68% of primary malignant melanoma and 50% of metastatic melanoma. Of the dysplastic nevi, 70% were negative. It is also expressed in atypical fibroxanthoma, but it is negative in all examined papillary renal cell carcinoma.

**Conclusion.** We suggest PRAME immunohistochemistry (IHC) as a marker to predict the ability for immunotherapy in the malignant melanocytic lesions and in situ melanoma. A cocktail of immunohistochemical markers should be used in the diagnosis of difficult cases and to avoid misdiagnosis and pitfalls.

S. E. Weißinger, Mutational profiling in spindle cell and desmoplastic melanoma. S. E. Weißinger1,2, J. C. Thierauf3,4, J. K. Lennerz1; 1Institute of Pathology, Alb Fils Kliniken GmbH, Göppingen, Germany, 2Institute of Pathology, University Hospital Ulm, Ulm, Germany, 3Massachusetts General Hospital, Molecular Pathology Unit, Boston, United States, 4University Heidelberg, Heidelberg, Germany, 5Massachusetts General Hospital, Center for integrated diagnostics, Boston, United States.

**Background.** Spindle cell (SM) and desmoplastic melanoma (DM) are subtypes of melanoma that differ in clinical, histomorphological, and genetic features from other types of melanomas. The genomic profile, especially of spindle cell melanoma, has rarely been examined.

**Methods.** To evaluate the genomic profile of SM and DM, we analyzed six SM and six DM formalin-fixed and paraffin-embedded patient samples from a previous described cohort of spindle cell and desmoplastic melanomas [1, 2]. Furthermore, we performed anchored multiplex PCR for next generation sequencing (NGS) to detect fusion transcripts, single nucleotide variants, insertions, deletions, and copy number variations in a panel of 39 different genes, including BRAF or NRAS as potentially therapeutically relevant target genes.

**Results.** NGS revealed mutations in BRAF, co-occuring with alterations in TP53, PTEN, or KRAS in 2 of 12 (17%) of the cases. NRAS and/or PIK3CA mutations could be found in 2 of 12 (17%) of the cases, whereas a mutually exclusive mutation in TP53 could also be detected in 2 of 12 (17%) of the cases. We did not identify KIT mutations or fusion transcripts. Furthermore, there was no significant difference in mutational signature between SM and DM; however, in this cohort, BRAF mutations occurred more frequently in SM (2 of 6) than in DM (0 of 6).

**Conclusion.** Genetic distinction of SM and DM will require more comprehensive approaches. Prognostically relevant and/or targetable genetic alterations were found in 75% (9 of 12) of the cases, arguing for mutational profiling, when clinically indicated.

**Geschäftssitzung.** In der Mitgliederversammlung wurden die Leiter der AG einstimmig wiedergewählt.

**Einhaltung ethischer Richtlinien**

**Interessenkonflikt.** E. Bierhoff und D. Metze geben an, dass kein Interessenkonflikt besteht.

Dieser Beitrag beinhaltet keine vom Autor durchgeführten Studien an Menschen oder Tieren.

The supplement containing this article is not sponsored by industry.

**Literatur**

1. Weißinger SE, Keil P, Silvers DN, Klaus BM, Möller P, Horst BA, Lennerz JK (2014) A diagnostic algorithm to distinguish desmoplastic from spindle cell melanoma. Mod Pathol 27(4):524–534
2. Weißinger SE, Frick M, Möller P, Horst BA, Lennerz JK (2017) Performance testing of RREB1, MYB, and CCND1 fluorescence in situ hybridization in spindle-cell and desmoplastic melanoma argues for a two-step test algorithm. Int J Surg Pathol 25(2):148–157