

Absztrakt részletei

Absztrakt alapadatok

Előadás módja experimentális szekció (szóbeli)

Kategóriák dermatoonkológia

Absztrakt megjelenő szövegek

Az absztrakt
beküldő űrlap
címe Evaluation of the efficacy of multispectral imaging and dermatoscopy for the prediction of Breslow's tumour thickness in malignant melanoma

Bevezetés The incidence of melanoma malignancy has shown a significant increase in recent decades. Knowledge of histological Breslow's tumour thickness is essential for the selection of an appropriate safety zone during surgical management. In recent years, several publications have addressed the use of dermoscopy to determine tumour thickness, but this method requires specialised knowledge and a high level of skill.

Aim: In our study, we aimed to assess the applicability of multispectral imaging (MSI) for predicting Breslow's tumour thickness and to compare it with the effectiveness of dermoscopy in daily practice in estimating tumour thickness.

Beteganyag és
módszer Our study was conducted at the Department of Dermatology, Venereology and Dermat oncology, Semmelweis University, where 100 patients with primary melanoma were included. Three MSI channels were used to determine intensity values and shape parameters: green (525 nm), red (660 nm) and infrared (940 nm) channels. Image analysis was performed using ImageJ software. Three categories of melanomas were investigated, which also define the required safety zone size: Breslow $\leq$ 1mm, Breslow 1-2mm and Breslow $>$ 2mm. Based on the acquired MSI images, we developed a new algorithm that can categorize melanomas by thickness based on shape and intensity parameters. We compared the effectiveness of the tool with the performance of dermatology specialists and residents in predicting tumor thickness based on a questionnaire containing clinical and dermatoscopic photographs of the melanomas under investigation.

Eredmények The developed MSI was able to categorize melanomas according to tumor thickness with 78.00% sensitivity and 89.00% specificity. Based on the questionnaire, dermatology specialists and residents were able to separate melanoma groups with 60.16% sensitivity and 80.75% specificity

Következtetés CONCLUSIONS: Compared to dermatoscopy, MSI separated melanoma tumor thickness groups with higher sensitivity and specificity. Based on our results, MSI may be suitable for noninvasive preoperative prediction of melanoma malignant Breslow's tumour thickness. The technique has the additional advantage of being automated and low cost, and may be introduced in the future alongside the dermatoscope in routine clinical practice.

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MAGYAR DERMATOLÓGIAI TÁRSULAT 95. NAGYGYŰLÉSE

Dermatológiai Továbbképző Tanfolyam
és XXI. Dermato-Pharma Szakkiállítás

TERVEZETT PROGRAM



2022. szeptember 15-17.
Debrecen, Kölcsey Központ



Prof. Neuber Ede
(1882-1946)

Péntek | 2022.09.16.

SZEKCIÓTEREM I.

08:45

SZPONSZORÁLT SZIMPÓZIUM - MSD PHARMA

09:15

SZÜNET

KÍSÉRLETES BÖRGYÓGYÁSZATI ELŐADÁSOK

Megnyitja: Prof. Dr. Gyulai Rolland, a Magyar Dermatológiai Társulat elnöke,
Prof. Dr. Szegedi Andrea, a Magyar Dermatológiai Társulat Experimentális dermatológia
szekció elnöke

09:45

EXPERIMENTÁLIS SZEKCIÓ ÜLÉSE I. - MELANOMA SZEKCIÓ

Üléselnökök: Dr. Emri Gabriella, Prof. Dr. Wilkonkál Norbert

The diagnostic and prognostic role of Serum S100b and Ldh biomarkers in metastatic melanoma (8')

Dr. Janka Eszter Anna

Genetic dependency and compound sensitivity mapping of melanoma based on proteogenomic profiling (8')

Szabolcs Botond

Evaluation of the efficacy of multispectral imaging and dermatoscopy for the prediction of Breslow's tumour thickness in malignant melanoma (8')

Dr. Bozsányi Szabolcs

Utilizing transcriptomic analysis to validate proteomic data associated with progression in melanoma (8')

Lutz Elmar Gregor

Immune checkpoint inhibitors and COVID-19 vaccination in skin cancers (8')

Dr. Németh Viktória

Diszkusszió (20')