

## **Guideline**

# **Management of skin lesions with the C-Rapid-H-Plus Protocol**

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### **Abstract**

Skin cancer, especially malignant melanoma, can vary greatly in appearance and usually develops very quickly. Therefore, the ABCDE rule (also known as the ABCD rule in some countries) was propagated many years ago to help medical laymen to recognize for themselves when it is time to see a dermatologist. But how effective is this rule? Our previous work clearly demonstrates that another self-monitoring protocol has a higher sensitivity and better results than the outdated ABCDE rule: the **C-Rapid-H-Plus Protocol** which has also become an important tool in tele-dermatology.

# The C-Rapid-H-Plus Protocol

The **C-Rapid-H-Plus** protocol<sup>1</sup> is proving to be a strategy of significantly improved patient safety in the era of teledermatology. Its establishment and success is inextricably linked to the enabling of telemedicine services in the field of dermatology. Above all, it can also be implemented in traditional dermatological medical practices, provided that a privacy-protected digital "consultation room" is set up and reliably used.

**C** stands for **change** in any way, shape, or form.  
**Rapid** means **very prompt excision**, within any hesitation, 10 days at the latest without dermatoscopy or other time consuming tests prior to excision.  
**H** is about leaving to make the **definitive diagnosis to a histopathology lab**.  
**Plus** expresses the offer and encouragement to send in photos of changing skin lesions together with a detailed message in the interval, i.e. in the long periods **between regular check-ups** in the local practice (at any time, around the clock), which will be evaluated, analyzed and answered by a dermatologist at the latest after 24 hours.

## Real world implications

Since the introduction of the C-Rapid-H-Plus protocol in 2020 in the clinics at which we work, we have seen a 58.6% (until February 2022) decrease in advanced stage skin cancer cases at first patient-dermatologist contact.

The number of skin cancer cases requiring non-surgical follow-up after wide and deep excision has dropped to zero in our own patients. This is highly remarkable. We assume that this is also related to the less complex patient education and the digital consultation room as a convenient and always accessible service for patients. The latter in particular seems to be of immense importance.

## Conclusion

By replacing the unreliable and often confusing ABCDE rule<sup>7,8,9</sup> with the C-Rapid-H-Plus protocol, we were able to reduce the number of advanced skin cancer cases in our patients to zero. A result that is consistent with data from other work. Telemedicine will and must play an important role in this new approach, just as the hesitation regarding excision biopsies in dermatology must come to an end.

## Conflicts of interest

Dr. Diamandis, Dr. Lazar and Dr. Seideman work in the field of (immuno-)dermatology as clinicians. Dr. Makri and Dr. Ivanova have nothing to declare.

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