PEARLS

Practical Evidence About Real Life Situations

Limited evidence for benefits of computer-assisted techniques for diagnosing skin cancer in adults

Clinical Question	Compared to dermoscopy, how effective are computer-assisted diagnosis (CAD) techniques (dermoscopy and spectroscopy-based) for diagnosing skin cancer in adults?
Bottom Line	Metaanalysis found CAD systems had high sensitivity for ification of cutaneous invasive melanoma and atypical al melanocytic variants in highly selected populations, but very variable specificity, particularly for spectroscopy CAD was not possible to make summary statements about the use referred populations, or its accuracy in detecting keratinocyte ts use in any setting as a diagnostic aid, because of the udies. Twenty-four studies evaluated dermoscopy-based and ctroscopy-based techniques.
Caveat	The evidence base for individual systems was too limited to draw conclusions on which might be preferred for practice. It was not always possible to tell whether suspicion of skin cancer in study participants was based on clinical examination alone, or both clinical and dermoscopic examinations.
Context	Early accurate detection of all skin cancer types is essential to guide appropriate management and to improve morbidity and survival. When used in unreferred settings ('primary care'), CAD may assist general practitioners or other clinicians to more appropriately triage high-risk lesions to secondary care. Used alongside clinical and dermoscopic suspicion of malignancy, CAD may reduce unnecessary excisions without missing melanoma cases.
Cochrane Systematic Review	Ferrante di Ruffano L et al. Computer-assisted diagnosis techniques (dermoscopy and spectroscopy-based) for diagnosing skin cancer in adults. Cochrane Reviews, 2018, Issue 12. Art. No.: CD013186.DOI: 10.1002/14651858. CD013186. This review contains 42 studies involving 15,938 lesions.

Pearls No. 636, August 2019, written by Brian R McAvoy. C48

Systematic review link:
https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD013186/full