

Medical > In Vivo > Melanoma & Pigmented Lesion Research

35

A review of non-invasive imaging in extramammary Paget's disease.

Bayan CY, Khanna T, Rotemberg V, Samie FH, Zeitouni NC.; *J Eur Acad Dermatol Venereol.* 2018 May 15. doi: 10.1111/jdv.15072.

ABSTRACT

Extramammary Paget's Disease (EMPD) is a rare intraepithelial adenocarcinoma that classically manifests with pruritic, erythematous and scaling plaques. The clinical picture frequently mimics inflammatory or infectious conditions and is thus commonly misdiagnosed. The assessment of tumour margins is equally challenging as tumours have a propensity to spread beyond clinically visible boundaries. Appropriate non-invasive diagnostic tools can assist in the early detection, diagnosis and management of EMPD. This paper will review the literature on non-invasive imaging modalities used in EMPD. Articles from the PubMed database were selected based on relevance to the topic of this review. Articles that were not specific to EMPD and non-invasive imaging were excluded. Search strategy is further described in the methods section below. Eighteen articles were selected for this review: six PET/CT, five reflectance confocal microscopy (RCM), two photodynamic diagnosis (PDD), two dermoscopy, two MRI and one optical coherence tomography (OCT) paper(s). Dermoscopy, PDD, RCM and OCT can help to distinguish malignant conditions, including EMPD, from benign conditions. RCM and OCT can identify atypical cells in real-time, and have the potential to improve the accuracy of surgical margins intraoperatively and overall management. Distinctive confocal characteristics of EMPD have been described using RCM. The sensitivity and specificity of these findings require additional validation. Radiographic techniques also play a central role in the diagnosis of EMPD and assessment of disease spread. PET/CT and MRI can detect primary disease, nodal and distant metastases, with superior delineation of disease spread on MRI. Limitations of PET/CT are mainly related to primary tumour thickness, and size and FDG-avidity of nodal and distant metastases. Limitations of MRI include the fact that few studies have examined its use in EMPD; additional research is warranted. Randomized controlled trials and large prospective studies evaluating the use of non-invasive imaging in EMPD are needed. PMID: 29763511 DOI: 10.1111/jdv.15072