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Clinical utility of hybrid (SPECT/CT) imaging in calciphylaxis

Utilidad clínica de las imágenes híbridas (SPECT/ CT) en la calcifilaxis

Dear Editor,

We congratulate Herrera-Martínez et al. for the excellent management of their patient with calciphylaxis.[1] With regards to the role of hybrid imaging in calciphylaxis we would like to mention few additional points which we believe could add to the fund of knowledge of our readers.

The important question to the research bodies working on calciphylaxis will be would hybrid image (SPECT/CT) replace skin biopsy. As suggested by Herrera-Martínez et al., skin biopsy has its own limitations and complications and any test like SPECT/CT hold that potential. However, we want to bring into the discussion regarding the close differentials of calciphylaxis. Will SPECT/CT be able to differentiate the various skin lesions like cellulitis, vasculitis, or atherosclerosis or warfarin necrosis? Other questions that require immediate attention are: cost effectiveness and clinical utility of early vs late SPECT/CT, clinical benefit of combined diagnostic approach (SPECT/CT plus skin biopsy) versus SPECT/CT alone, random skin biopsy of skin lesions vs SPECT/CT guided biopsy of the most intense uptake site. Most common site of calciphylaxis is lower limbs which is usually amenable site for skin biopsy. There are specific locations like penis where skin biopsy is contraindicated.[2,3] In such locations, we believe that the clinical utility of SPECT/CT alone could potentially of extreme importance. Successful treatment by Herrera-Martínez et al. also encourages us to think that is there any correlation between the differential responses to therapy depending on extent of calciphylactic lesions detected on SPECT/CT?

Due to lower specificity of SPECT/CT, should we limit this study only to long-term non-healing ulcers in the setting of end-stage renal failure? We highlight this point due to the fact that there are many other clinical differentials for the skin lesions in ESRD patients and doing a SPECT/CT in all cases may not be justified. The skin lesions in Herrera-Martínez et al. case was just few days old for which SPECT/CT was done. We wish to educate our readers not to make any general inference to do SPECT/CT in all cases of newly evolved skin lesions in ESRD. Ideal would be to diligently rule out all the other differentials as mentioned above.[4] Another point on which future studies can be directed is to study the follow up SPECT/CT to see the follow up response of calciphylaxis to treatment of sodium thiosulphate.

In conclusion, newer non-invasive advancements in detecting calciphylaxis are encouraging but there are still many questions that needs to be settled before any guidelines can be laid down.[5]

Ethical statement

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Conflict of interest

Authors have no conflicts of interest to declare.

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