

## عنوان مقاله:

Review of transmission scanning configurations in cardiac SPECT

## محل انتشار:

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## خلاصه مقاله:

The diagnostic accuracy of single photon emission computed tomography (SPECT) is profoundly influenced by attenuation phenomenon. Soft tissue attenuation degrades cardiac SPECT image quality, thereby decreasing the possibility of the detection of the lesions. A variety of correction techniques based on different assumptions have been used to reduce the impact of attenuation. Several types of systems with different transmission hardware modifications and external sources have been developed for clinical implementation. Each system has unique advantages and limitations. In this study, firstly, we introduce the attenuation phenomenon, the problems arising from it and the attenuation correction methods with description of the assumptions related to each of them. The main purpose of this study is to review the developments in the field involving various configurations used for attenuation correction of SPECT images, as tested using either phantom or clinical data, and to delineate an optimal attenuation correction technique by considering the advantages and limitations with each of the configurations.

## کلمات کلیدی:

SPECT, Attenuation, Emission data, Transmission data, Correction factor

## لینک ثابت مقاله در پایگاه سیویلیکا:

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