

The evolutionary stage changes in sarcoidosis on gallium-67 scintigraphy

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Gallium-67 scintigraphy has been proven as the imaging modality of choice in monitoring the presence of active disease in sarcoidosis. The purpose of this study is to analyze the patterns of evolutionary stage changes of sarcoidosis while on steroid therapy by Ga-67 scintigraphy. *Methods:* Eighty-six consecutive patients with biopsy-proved sarcoidosis are evaluated by Ga-67 scintigraphy. Thirty-six of 86 patients have had a baseline and one to eight follow-up Ga-67 scintigraphs (total 136 studies). The initial follow-up scintigraphs are obtained on average about 4-12 months after the baseline study. *Results:* Seventeen of 36 patients (47.2%) are in stage IV at the time of the baseline study. Following their first course of corticosteroid therapy, 13 patients remained in the same stage and activity distribution pattern while 13 patients have shown reversion to other stages, eight patients showed complete remission while two patients became active from inactive stage. *Conclusion:* Evolutional stage changes are seen in 23 patients (63.9%), including eight patients (22.2%) who showed complete scintigraphic remission. The evolutionary stage changes remain quite variable and unpredictable. This, however, should not detract from the usefulness of Ga-67 scintigraphy in the diagnosis and prognostic evaluation of sarcoidosis, particularly when extrapulmonary involvement (Stage IV disease) is present.

Key words: sarcoidosis, classification, evolutionary stage changes, Ga-67 scintigraphy, monitor