

PET Recommendation Report 11

Clinical Utility of Positron Emission Tomography in the Diagnosis, Staging, and Management of Sarcoidosis

J. You, B. Hyland, and S. Henderson

A Quality Initiative of the Program in Evidence-Based Care (PEBC), Cancer Care Ontario (CCO)

Report Date: August 24, 2011

PET Recommendation <u>Full Report</u> 11 consists of 2 sections and is available on the CCO Web site (<u>http://www.cancercare.on.ca</u>)

> Section 1: Guideline Recommendations Section 2: Evidentiary Base

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PET Recommendation Report 11

Clinical Utility of Positron Emission Tomography in the Diagnosis, Staging, and Management of Sarcoidosis: Guideline Recommendations

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QUESTION

Is positron emission tomography/computed tomography (PET/CT) beneficial in the diagnosis, staging, or clinical management of patients with suspected or proven sarcoidosis?

TARGET POPULATION

These recommendations apply to patients with suspected or proven non-cardiac sarcoidosis. The decision to narrow the scope to non-cardiac sarcoidosis was based on the rationale that the cardiac sub-committee of the Ontario PET Steering Committee is currently conducting a review of the role of PET in cardiac sarcoidosis. As such, it would not be practical to include these studies in this review.

INTENDED PURPOSE

- This recommendation report is primarily intended to guide the Ontario PET Steering Committee in their decision making concerning indications for the use of PET imaging.
- This recommendation report may also be useful to inform clinical decision making regarding the appropriate role of PET imaging and to guide priorities for future PET imaging research.

RECOMMENDATIONS AND KEY EVIDENCE

No recommendation for or against the use of PET in the diagnosis, staging, or clinical management of sarcoidosis can be made at this time due to insufficient evidence.

Seven retrospective studies (1-7) evaluated ¹⁸F-FDG PET in the diagnosis, staging, or clinical management of sarcoidosis. The included studies are small and of low quality and did not present any quantitative data with respect to patient-important outcomes. They did, however, present very preliminary evidence suggesting that ¹⁸F-FDG PET may have greater sensitivity than other imaging modalities for the diagnosis of sarcoidosis and that changes to ¹⁸F-FDG PET may correlate with treatment response.

Qualifying Statements None

FUTURE RESEARCH

Based on the findings of the systematic review of the evidence, prospective studies of PET in sarcoidosis are warranted. As the disease is relatively uncommon, multicentre studies would be optimal. Additionally, the quantitative assessment of patient-important outcomes (e.g., using validated quality-of-life or disease-activity instruments) should be included in the data collection.

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