Acute coronary syndromes are a frequent manifestation of coronary artery disease, usually being associated with chest pain and presenting as a medical emergency. Since a considerable number of patients with chest pain, however, have a non cardiac etiology of their pain, properly triaging these patients represents a diagnostic challenge for physicians in the emergency department. As the available diagnostic procedures have limited accuracy, many different diagnostic strategies have been evaluated. Among these, radionuclide myocardial perfusion imaging (MPI) at rest or in combination with stress procedures has been investigated in many trials. MPI has been proven to be useful, especially in a patient population with a low to intermediate probability of an ischemic event. Perfusion scintigraphy has a high sensitivity in the detection of myocardial infarction and reveals an excellent negative predictive value, allowing a safe discharge strategy of patients with a negative scan result. Moreover, it enables risk stratification and provides incremental and independent prognostic information regarding short to long term future cardiac adverse events. Several cost effectiveness studies have shown that perfusion imaging leads to lower overall direct costs, mainly by a reduction of unnecessary hospital admissions and diagnostic angiograms, without worsening of the clinical outcome of these patients. As a possible study endpoint, myocardial perfusion imaging in the acute setting enables the quantification of salvaged
myocardium and therefore the evaluation of treatment efficacy. Besides perfusion agents, several infarct avid radiopharmaceuticals have been developed, which in part show promising results. However, larger randomized trials evaluating these tracers in clinical settings are needed to warrant routine clinical application.

Zeitschriftentitel / Abkürzung:  
Q J Nucl Med Mol Imaging

Jahr: 2005

Band: 49

Heft / Issue: 1

Seiten: 59-71

Sprache: eng


Print-ISSN: 1824-4785

TUM Einrichtung:  
Nuklearmedizinische Klinik und Poliklinik

Occurences:  
- Einrichtungen > Fakultäten > Fakultät für Medizin > Kliniken und Institute > Nuklearmedizinische Klinik und Poliklinik > 2005

entries: