



radiology SA

SPECT /CT FOR ACCURATE ASSESSMENT PRIOR TO FACET JOINT INJECTIONS - INCREASES BENEFIT FOR PATIENTS

The ability to detect and localise an arthritic process in spinal facet joints is improved in spinal bone scans if a tomographic study (SPECT scan) is performed.

The accuracy of this localisation is further enhanced when the SPECT image is fused to a CT image which serves as an anatomical map and therefore allows accurate correlation of the physiological information from the SPECT bone scan. This translates to a higher accuracy of facet pathology localisation.

Recent studies (1,2) show SPECT/CT to be useful in determining which patients are likely to benefit from corticosteroid/anaesthetic facet joint injection. Pneumaticos et al (1) demonstrated symptomatic improvement in 86% of patients with bone scans positive for facet joint abnormalities vs 12% in those with negative bone scans. Symptomatic improvement only occurred in 31% of those patients who did not undergo bone scintigraphy and were injected on the basis of clinical findings and radiological findings alone.

Therefore the use of SPECT/CT prior to facet joint injection is recommended to improve the efficacy of this procedure and to minimise the need for unnecessary multilevel/bilateral injections for your patients.

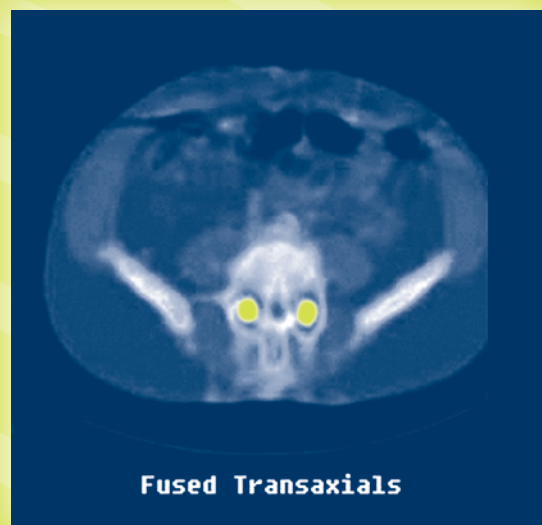
Our Nuclear Medicine Department at Calvary has a hybrid gamma camera/CT scanner which allows sequential SPECT and CT imaging in the same session.

Please contact our Nuclear Specialists directly on 8402 0200 for more information.

Dr Robert Cooper MBBS, BSc, FRANZCR

1) Pneumaticos et al, Low Back Pain: Prediction of Short Term Outcome Of Facet Joint Injection with Bone Scintigraphy. Radiology 2006; 238:693-698

2) Holder et al, Planar and High Resolution SPECT Bone Imaging in the Diagnosis of Facet Syndrome. J Nucl Med 1995; 36: 37-44



Fused Transaxials

This patient had marked widespread disc degenerative changes, a crush fracture and facet joint changes on MRI. SPECT/CT images show an uptake abnormality at the L4/L5 facet joints. Injection of the L4/L5 facet joint resulted in two years of pain relief for this patient. SPECT/CT has been shown to accurately predict which patients will benefit from facet joint injections.

Please see over...

Appointments and Enquiries 8402 0200, Toll Free 1300 732 270

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89 Strangways Terrace,
North Adelaide

The Memorial Hospital
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radiology SA

RADIOLOGY SA - OFFERING A COMPREHENSIVE NUCLEAR MEDICINE SERVICE

Our Nuclear Medicine team continues to strive to provide a comprehensive, efficient and caring service. Radiology SA is staffed by specialists with skills covering all areas of scintigraphic imaging, with particular expertise in Cardiac, Cerebral, Musculoskeletal and SPECT/CT Fusion. The team is delighted to welcome Dr Robert Cooper, a Nuclear Radiologist who has a special interest in scintigraphic tomography (SPECT scans) and image fusion (see over page for more info). Our doctors are supported by a meticulous team of technologists who strive to provide benchmark results in scan quality and excellent standards of patient care.

Robert Cooper MBBS, B Sc, FRANZCR Radiologist and Nuclear Medicine Specialist

Dr Cooper has completed specialist Nuclear Medicine training and PET credentialing and has a special interest in oncology imaging. He has co-authored a textbook chapter on Musculoskeletal SPECT imaging. He holds public hospital appointments in radiology at the Royal Adelaide Hospital and Flinders Medical Centre.

C. Ghee Chew MBBS, FRACP Renal and Nuclear Physician

Dr Chew has been a Nuclear Medicine Physician since 2000. In his current appointment at the Royal Adelaide Hospital and in private practice he actively performs all modalities of scintigraphic imaging including holding certification in PET. Ghee has special interests in cardiac, musculoskeletal and renal scintigraphy. He is also a Renal Physician with the Renal Unit at the Royal Adelaide Hospital.

Rey Casse MBBS, FRACP Neurologist and Nuclear Physician

Dr Casse received his neurology fellowship in 1997. He subsequently undertook Nuclear Medicine training at the Austin Repatriation Hospital in Melbourne and The Queen Elizabeth Hospital in Adelaide. Rey holds a public appointment at The Queen Elizabeth Hospital, where he is involved in clinical and research programs, studying functional cerebral imaging in memory disorders, epilepsy and psychiatric disorders.

Viv Hall MBBS, FRANZCR Radiologist and Nuclear Medicine Specialist

Dr Hall completed her MRI Fellowship followed by specialist Nuclear Medicine training in 1996. Viv has appointments at the Royal Adelaide Hospital and Breast Screen SA. Her interests include oncology, sports medicine and orthopaedic imaging.



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