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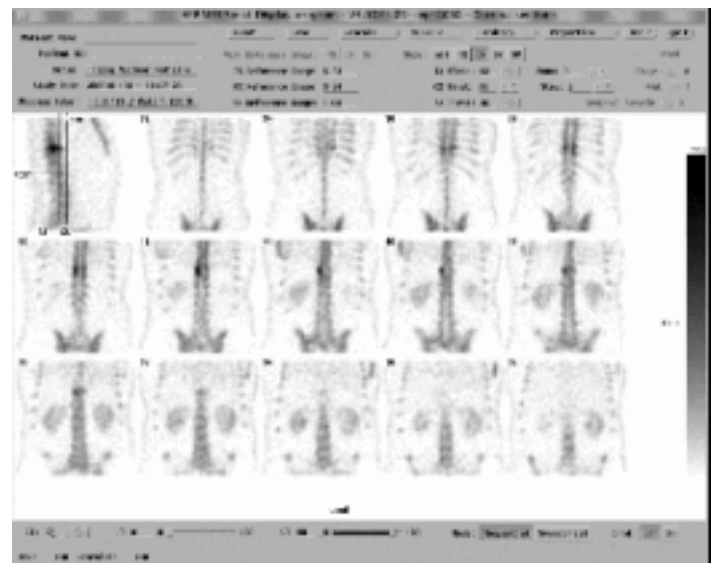
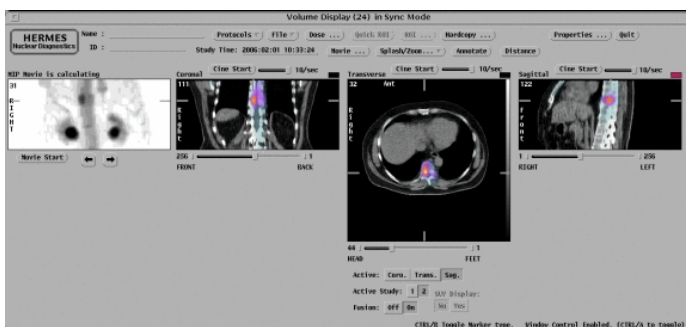
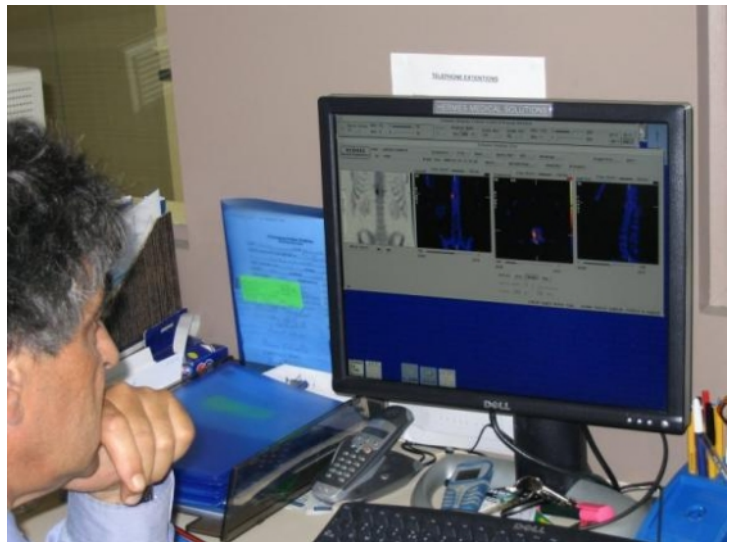
Case of the Month

HERMES CASE OF THE MONTH - April 2006

T10 Myeloma

Case history:

52-year-old man presented to Nuclear Medicine Outpatient Department with 2-3 month history of persistent mid-thoracic spine pain, not responding to rest and conservative treatment, plain x-ray unhelpful, pain began with a lifting injury, although this was only considered mild.



CASE INFORMATION

Imagesets were generated using a hybrid SPECT/CT system comprising of an Elscint CT scanner and a Philips SkyLight gamma camera. These two devices were linked by a common patient table moving along parallel floor tracks. This minimized patient movement and aided image registration. Images were fused using HERMES Multimodality Image Fusion Software.

SPECT/CT images confirm intense activity in the right lateral aspect of the body of T10, with little activity on the left side of the body. CT scan however, shows an infiltrating lesion invading the body and posterior elements.

These were highly suspicious findings for myeloma, and although at the time of presentation no clinical evidence of cord compression or neurological signs - urgent MRI performed after the SPECT/CT, confirmed near total spinal cord compression. Urgent radiotherapy commenced and treatment started the following week. Final diagnosis multiple myeloma.

The significance of this study was that the initial x-rays were normal and the bone scan at the time 2-3 months after the lifting injury was non-specific, but in the view of the attending clinician this was noted to be slightly atypical and for this reason a SPECT/CT study was performed.

The important lesson from this is that the atypical nature of the bone scan findings necessitated further investigations and SPECT/CT confirmed pathology. An MRI performed not for diagnosis but to confirm likely spinal cord compression.



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