

## Correspondence

# Emergency action needed by Asian countries to control diabetes

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It is a fact that five of the six countries with the highest prevalence of diabetes in the world are from Asia.<sup>1</sup> Among the many suggestions and ways to help control the epidemic of diabetes, the use of low Glycemic Index (GI) as well as low Glycemic Load (GL) foods may be part of an effective solution. Data from epidemiological and clinical investigations show that a low GI diet facilitates weight management and a reduction in body fat<sup>2</sup>, improves glycaemic control<sup>3</sup>, reduces systemic inflammation<sup>4</sup> and improves blood lipid profiles.<sup>5</sup>

It has been suggested that in a country of high diabetes prevalence, dietary therapy based on a consideration of the GI is likely to be beneficial to help curb the rising incidence of disease, as well as many other chronic diseases such as Cardiovascular Diseases.<sup>6</sup>

Literature search revealed that there are few studies to show the GI for local foods in Western Asia. It is not clear why until now, there wasn't any local table of GI for local foods.

So, it is necessary for scientists to improve their understanding about GI as well as GL and do more testing of local foods so that they can educate the public about the meaning of GI and GL as well as facilitate its application for good health. One of the effective methods for improving the application of GI is GI Symbol which appears on food products in some countries.

It seems that application of GI is going to a new perspective (such as application of GI Symbol of food products). So, these countries of Asia, which has the highest rate of diabetes in the world<sup>1</sup>, should take urgent steps for drawing GI and GL of their own local foods.

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## Nuclear Medicine Imaging of Osteoid Osteoma

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We read with interest the article of Mehdinasab et al published in *Pak J Med Sci*, 2010 with great interest.<sup>1</sup> It is an academically interesting report of osteoid osteoma occurring on an unusual site. Authors have carefully reviewed the literature. They presented case of 15 years old girl who complained of left knee pain, more precisely localized to left patella. Pain was typically increasing in intensity during the night and responding well to non-steroidal analgesic drugs. Physical examination, laboratory tests and initial radiograph were unremarkable. Second X-ray film was obtained six months after initial presentation and that raised the suspicion of osteochondritis. At this stage patient was sent to nuclear medicine department for skeletal scintigraphy. Dynamic bone scan (three phase study) was performed with parallel hole collimator. Diagnosis of osteoid osteoma was suspected. CT scan strengthened the suspicion and excision biopsy proved it osteoid osteoma. We believe, and this belief is based on personal experience strongly supported by peer reviewed published literature, that nuclear medicine techniques are highly sensitive for detection of skeletal abnormalities. To date, no false negative bone-scan is reported in patients with osteoid osteoma and reported sensitivity of skeletal scintigraphy for osteoid osteoma is 100%.<sup>2</sup> Bone scanning provides an added advantage to the surgeon and the pathologist in confirming resection of entire extent of tumor and locating the lesion for histological examination. Autoradiography of the specimen further helps in characterization of the lesion and helps in further research as well.

Flow, pool and delayed images of bone scan shown in the article are of not optimal quality. Scintigraphic images, most of the time, are without strong

morphological landmarks. It is important for researchers to present the best possible images with highest possible resolution to journals so that readers can get maximum benefits from the efforts of authors. We suggest, in this scenario, to submit soft copies of images directly taken from imaging console computers or dedicated workstation linked to gamma camera units. DICOM provides raw data as well digital images of optimal quality.

Second point we would like to raise about the technique used in this case is that since symptoms were localized to a small area (knee joint / patella), pinhole collimator imaging would have given best resolution. Tomography (SPECT) can further enhance the confidence of findings to localized and characterize the pathology. It is already reported in high impact journals that pin hole collimator and SPECT imaging are far superior than conventional routine imaging.<sup>3-4</sup>

It was a pleasure to see well selected and well presented relevant slice of CT scan. CT scan provides better delineation, especially the nidus<sup>5</sup> and MRI shows positive T2 signals due to high levels of COX2 expression in the osteoblasts located in the nidus.<sup>6</sup> Addition of CT scan / MRI with image registration technique increases the readability of functional data obtained from scintigraphic techniques. Newer invention of hybrid imaging brings one stop shopping and that should at least be mentioned at the end of such nice reports as future possibilities.<sup>4</sup>

We would like to add that if symptoms are localized then pinhole collimator imaging should be performed. SPECT images registered / correlated with anatomical images; or hybrid imaging should also be considered in any future cases for work up. As far as reporting of cases is concerned best possible images taken either through DICOM or through network like PACS should be sent to journals.

Nuclear medicine techniques are sensitive than conventional radiography but their optimal use is essential to have a judicious role in early and prompt diagnosis. Use of radiation can only be justified if it has proper impact on patient management. It is utmost important for nuclear medicine imaging specialists and referring physicians to put proper

efforts to get maximum benefits from health management point of view and from teaching and training point of view.

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From orthopaedic point of view diagnosis of osteoid osteoma is mainly clinically based, and plain radiography, gamma scan and CT-Scan are sufficient for definite diagnosis.<sup>1-5</sup> Although as they have mentioned the newer techniques such as Pinhole collimator, Tomography (SPECT), and hybrid imaging are more sensitive and specific and can add to readability, but these methods are expensive and may not be warranted as a routine use in every case.

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