

FACILITIES:-

- WHOLE BODY-ULTRASOUND
- LIVE 3-D/4-D
- COLOR DOPPLER
- MAMMOGRAPHY
- BMD-DEXA
- ECHO CARDIOGRAPHY
- PRENATAL GENETIC STUDIES
- PATHOLOGY
- ECG

Add :

4, Royal Sands,
 'A' wing, Behind Infinity
 mall, Parallel to Link Rd,
 Andheri-(W), Mumbai.
 Tel: 2630 55 67/68/69

E-mail:

arcbombay@vsnl.net

Timings:

9.00 am to 7.00 pm

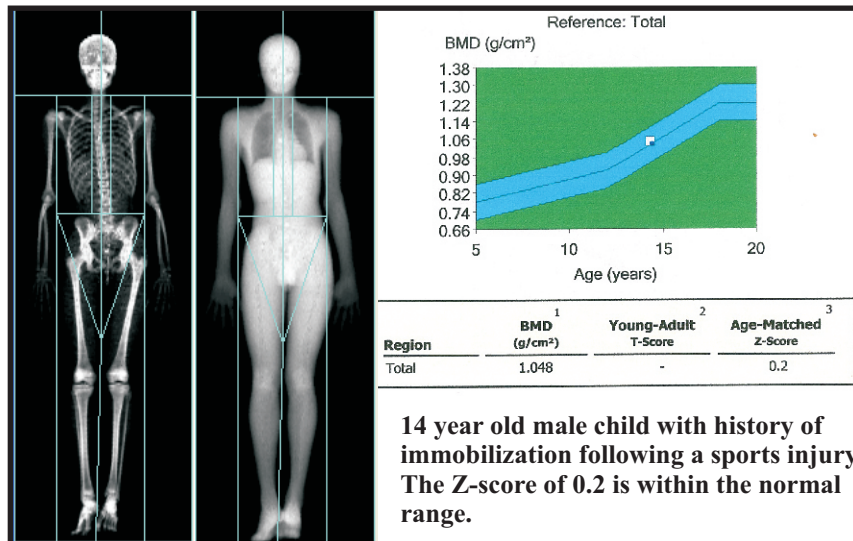
Sunday closed

PAEDIATRIC BONE MINERAL DENSITOMETRY

Dear Doctor, *Wishing you a very Happy 2009.*

As you are probably aware, Osteoporosis remains a major health problem worldwide and it is preventable and not curable. The treatment mainly focuses on reducing bone loss in adults. However, over the past decade it has become clear that events operating during fetal life, infancy and childhood may affect peak bone mass and therefore potentially influence the development of osteoporosis. Thus there is a need for suitable methods for monitoring bone health in children as this is an important period for bone development.

The most commonly used densitometry technique Dual X-Ray Absorptiometry (DXA) was developed in the late 1980s to diagnose and monitor osteoporosis in post-menopausal women. Using this technique, measurements can be made of the whole skeleton, as well as regions such as the lumbar spine, hips and distal radius.



Although DEXA involves radiation, the exposure per scan is generally in the range 0.4 - 5.4 usv that is below a day's back-ground radiation. This is extremely important in children.

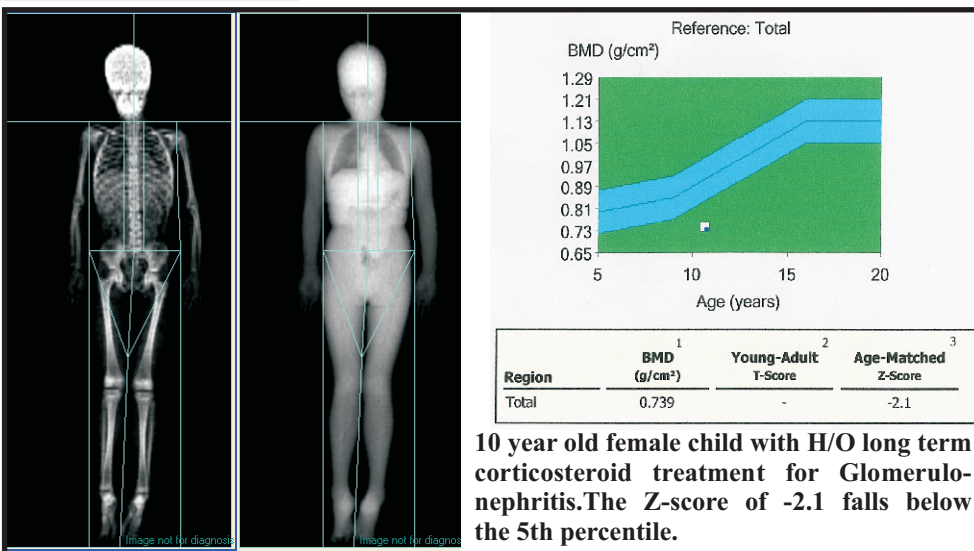
Inbuilt reference databases provide bone mineral content or BMD for age with separate reference data for boys and girls and a Z-score is generated. In post menopausal women, a T-score is generated, where the BMD values are

compared with that of a young adult. In children only the age matched and sex matched Z-score is used.

In the clinical situation, children are generally scanned either because they are at a risk of low bone density because of their underlying disease or treatment. Follow-up examinations can be done after a minimum period of 6 months to monitor effects of treatment.

SOME OF THE INDICATIONS FOR PAEDIATRIC BMD :

- Chronic inflammatory diseases
- Chronic renal failure
- Systemic long term corticosteroids
- Hypogonadism
- Anabolic steroid therapy
- Anorexia nervosa
- Cushing's syndrome
- Osteogenesis Imperfecta
- Idiopathic juvenile Osteoporosis
- Prolonged immobilization
- Muscular dystrophy
- Cachexic disorders (Aids, Cancer)
- Malabsorptive syndromes
- Cystic fibrosis



'ARC' is one of the few centers in this city where this facility of Paediatric BMD is available. When used appropriately, Bone Densitometry can be a very useful tool in treating children.