these aspects have been studied using chromosome aberration as a parameter, in different materials[11,12] but MNT technique which is new in the field of fish genotoxicology has advantages over chromosome aberration study. However, the frequency of chromosome aberrations was higher than that of MNC when the same dose of x-rays was used[8,13] because MN is formed due to limited types of anaphase chromosome aberrations like laggards and asymmetrical exchanges and its durability is time-bound[7] while many types of chromosomal aberrations can be directly observed cytologically. In spite of some limitations, the MNT technique has other advantages mentioned before and as more than one procedure is recommended for mutagenicity testing[14], MNT can be applied more easily.

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NEWS

EXTENDING USE OF ULTRASOUND TO DIAGNOSE BONE DISEASE

More than a year ago, researchers at Hull (Northern England) announced the development of a machine which uses ultrasound to detect the presence of osteoporosis, a bone disease which affects 25 per cent of women over 55.

Since then, the machine has gone into limited production. Devices are now installed in hospitals in different parts of Britain for use in diagnosing osteoporosis and for undertaking further research. The new machine is quicker, easier, cheaper and safer to use than present techniques using x-rays or radioactive tracers.

Dr Stuart Palmer, Reader in the Department of Applied Physics at Hull University, developed the machine with Mr. Richard Porter, consultant orthopaedic surgeon at Doncaster Royal Infirmary and Dr. Christian Langton, a research assistant at the same hospital.

The ultrasound machine involves the patient immersing her foot in a tank of warm water. Ultrasound waves are passed through the heel and the machine measures the extent to which the heel bone absorbs the ultrasound. The process takes just a few seconds. Readings from the heel give a clear indication of the presence of the disease at other points of the body. Present diagnostic techniques rely on X-rays or gamma rays, which do not give very accurate results, and radioactive tracers, with their consequent dangers, the need for expensive equipment and prolonged discomfort for the patient. *Spectrum* – British Science News, 1986, No. 196/12; British Information Services, British High Command, New Delhi 110028).