

Newsletter
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## **Our Facility**

We use a state of the art GE Lunar Prodigy densiometer with the capacity for vertebral fracture assessment (VFA).

If you, or your staff, are interested in trying this technology for yourself, please schedule with Patty von Grueningen, our office manager.

She can also provide you with brochures, script pads or whatever other information you might need.

You can reach Patty at ext. 102.

## Spruce Street Osteoporosis Center

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## DepoProvera (DMPA) and Bone Mineral Density (BMD)

In November 2004, the FDA put a black box warning on DMPA, warning against its use for more than two years unless "other methods of birth control are not right....." Since that time, there has been quite a bit of confusion by medical professionals regarding the management of patients on DMPA. It is thought that decreased endogenous estradiol levels may increase bone resorption.

BMD decreases during DMPA use. Many studies have found that, in adult DMPA users, BMD decreases from baseline levels, and, in adolescent DMPA users, BMD levels are reduced compared with nonusers. Most studies report overall BMD decreases of less than 1% per year of use. The same review article found that, in adolescents, differences in BMD reflect decreased BMD in DMPA users and increased BMD in nonusers. Almost all of the decrease occurs in the first two years of use, with little if any incremental bone loss during additional years of use.

**BMD recovery.** Studies of adult DMPA users have found that decreased BMD is reversed after discontinuation, by 1.8 years in the largest study. In another prospective cohort study, mean BMD in former DMPA users, 30 months after discontinuation, was similar to never-users at the either hip or spine. The pattern of loss and regain parallels that seen in lactating women.

In a population based, prospective cohort study of DMPA users aged 14-18 ( the only study of BMD changes following DMPA discontinuation by adolescents), mean BMD measured at all anatomical sites

reached or exceeded the levels of never-users by 12 months after DMPA discontinuation.

## **Professional Society Recommendations:**

ACOG Guidelines: skeletal health concerns should not restrict use of DMPA in adult women. In adolescents, the advantages of DMPA use outweigh the theoretical concerns regarding BMD and fractures. Consideration of long term use in adolescents should be individualized.

SAM Position Paper: SAM states that for the majority of adolescents the benefits of DMPA use outweigh the potential risks. The use of DMPA in adolescents can be continued without any restriction on duration of use. Counseling about the risks and benefits of DMPA use should be provided.

WHO Recommendations: The WHO recommends that there should be no restriction on use or duration of use of DMPA in adult women otherwise eligible for this method. Among adolescents, the advantages of DMPA use generally outweigh theoretical concerns regarding fracture risk. Overall risk and benefits for continuing DMPA use should be reconsidered over time with individual adolescents.

In the absence of other indications, bone densitometry should not be performed either at initiation or for follow up in apparently health women or adolescents using DMPA for contraception.