

Effect of Magnesium and Progesterone on Bone Mineral Density (BMD) without any Calcium supplements

Rebuilding Bone Mineral Density (BMD) is a slow process after menopause especially after taking Calcium supplements for a long period. As you are well aware now that Calcium supplements taken on a long term basis depletes Magnesium stores from the body. Magnesium is an important constituent in bone remodeling which gives flexibility to the bones and helps prevent fractures. Progesterone Hormone is also an important constituent in bone building, hence lack of this hormone in post menopausal women leads to higher incidence of Osteopenia and Osteoporosis. Calcium supplements usage in the absence of progesterone hormone lead to Osteopenia and Osteoporosis in your case.

Correcting this situation takes time but with adequate intracellular nutrition especially Organic Magnesium and Natural Progesterone, Osteopenia and Osteoporosis can be arrested and reversed.

In your case, with 9 months of treatment with Organic Magnesium (Org. Magnesium Forte and Magna Pak II) and Natural Progesterone (Progest/ Women Gel) along with other necessary nutritional supplements, we can already see a significant improvement in BMD at the level of Femur. In the table given below we have shown the comparison of your BMD studies done in November 2008 and November 2009 for your understanding.

	November 2008	November 2009	Increase
Femur			
BMD	0.508gms/cm ²	0.54gms/cm ²	0.032gms/cm ² = 6%
T Score	- 3.1	- 2.8	0.3 = 10 %
Vertebral Column			
BMD	0.959gms/cms ²	0.966gms/cms ²	0.007 = 1%
T Score	- 2	- 2	

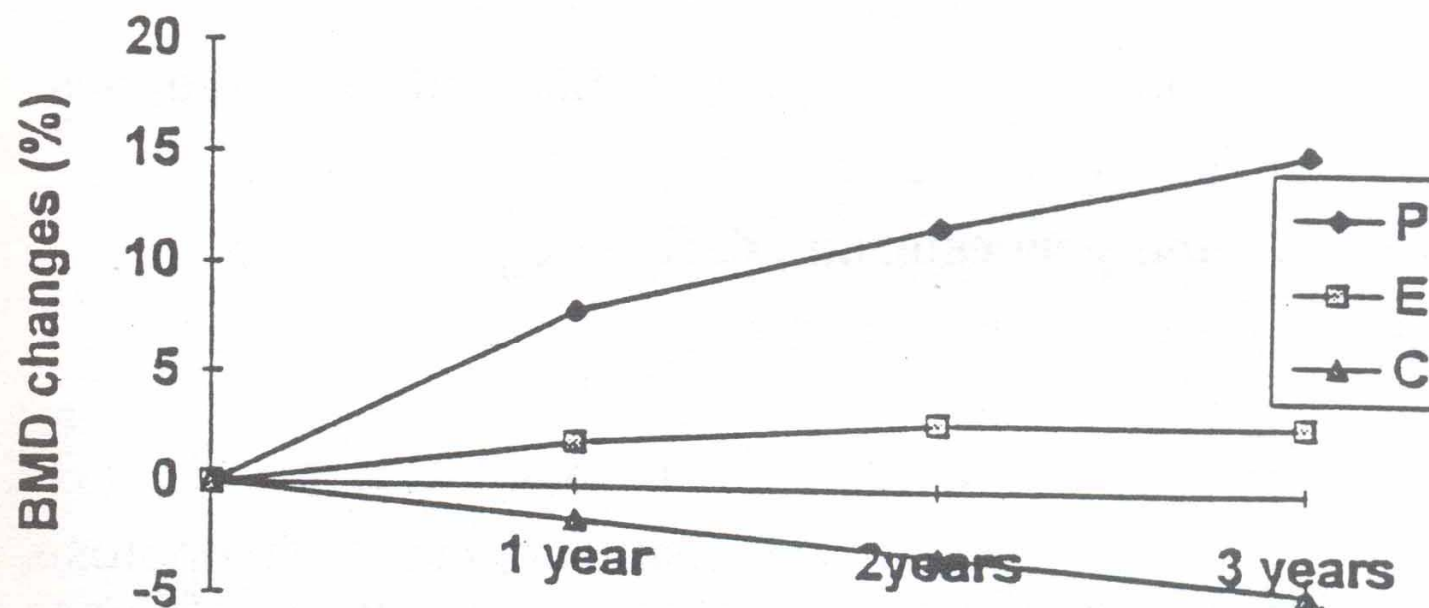
Comparison of the results shows that there is a **6%** improvement in BMD / **10%** improvement in T Score at the Femur and **1%** improvement in BMD at the Vertebral column which is significant within this short span of 9 months (March to November 2009). This is in addition to the regular loss of Calcium (about 2.0%) each year from the bones in the absence of any Hormonal support. This meets the statistical expectation of BMD increase with the use of Bioidentical Progesterone as per the Graph given below which shows a 15% increase in Bone Mineral Density over a 3 year period.

Putting sincere efforts in following the prescription given, will earn you desired effects in time and your body seems to be responding well to the treatment for reversal of Osteopenia and Osteoporosis.

Summary:

In the absence of any treatment, the loss of BMD would have been about 2% during this period. The overall BMD benefit of treatment has been therefore **2.0% + 6.0% = 8.0%**. In addition, the use of Magnesium has resulted in Bone Flexibility which has further reduce the risk of future Fractures considerably. An increase in BMD corresponds to **reduction in Hip Fracture Risk. The addition of Bone Flexibility, will reduce Bone Fracture Riskss still further.**

Natural Progesterone Stimulates Bone Building



Typical 3 years Bone Mineral Density (BMD) changes using:
a) Bio-identical Progesterone (P);
b) Estrogen only (E); and
c) Control (C) (i.e., without Bio-identical Hormone Therapy)

Case Study - Increasing Bone Mineral Density
Effect of Magnesium and Bioidentical Progesterone
on Bone Mineral Density (BMD)
without any Calcium Supplements

Patient: Female, Age: 48, Height: 5ft 1 in., Weight: 48.727 Kg., Fat = 21.8% (-), BP = 87 / 59, Pulse = 70, Diet: Vegetarian (Ref: JG)			
	*11/27/2008	**11/24/2009	Improvement
Femur			
BMD	0.508gms/cm²	0.54gms/cm²	0.032gms/cm² = 6%
T Score	- 3.1	- 2.8	0.3 = 10 %
Vertebral Column			
BMD	0.959gms/cms²	0.966gms/cms²	0.007 = 1%
T Score	- 2	- 2	
Organic Magnesium (Forte) 180mg/100 capsules		8 bottles of 100 caps each	
Magna-Pak II - 50 single sachets		7 boxes of 50 sachets each	
Progest XL Gel (50mg/g) - 15 Gms		3 bottles	
Women's XL Gel – 50/2.5/2.0 mg/g		1 bottle	
Triest - LD Gel (0.6mg/g) - 15 Gms		1 bottles	
Organic Zinc (Forte) 100 mg 60 capsules		2 bottles of 60 caps each	
* These readings are prior to starting the Whole Body Detoxification and Rejuvenation Program along with Intracellular Nutritional supplements. The Program started from 02/22/2008			
** These are the readings recorded after 9 months (March to November) of treatment with Organic Magnesium with other supporting essential nutritional supplements and , Progest XL Gel (Bioidentical Progesterone).			

Table 01 – Reducing Risk of Fracture by increase Bone Mineral Density