Medroxyprogesterone Acetate (MPA) Versus Natural Progesterone (NP)

Lipid Profile:
MPA adversely affects lipid profile and negates the beneficial effects of CEE¹
NP does not negate the beneficial effects of CEE and modestly improves cholesterol levels²

Liver function
MPA is contraindicated in patients with liver dysfunction³
NP does not effect liver enzymes or cause liver-related side effects⁴,

Cardiovascular events
MPA may cause fluid retention and edema⁵
NP has antihypertensive action and can be safely used to treat preclampsia⁵,⁶
MPA increases incidence of CHD, stroke and VTE⁷, and diminished the cardio-protective effect of estrogens⁸.
NP, with estrogen, prevents the coronary vasospasms (in rhesus monkey⁹,¹⁰) and enhances the beneficial effect of estrogen on exercise-induced myocardial ischemia in postmenopausal women¹¹

Glucose/Insulin
MPA has been found to cause deterioration of glucose tolerance or hyperinsulemia or both¹²
NP augments the pancreatic response to glucose and increases the release of insulin¹²

Sleep and Mood
MPA can cause insomnia, mental depression, and anxiety¹³
NP improves the quality of sleep¹³, and has sedative properties¹⁴

Bone Density
MPA can reduce bone density 5-6%²,¹⁵

NP is a bone trophic hormone¹⁶

Quality of Life/Menopause Symptoms
Vasomotor symptoms, somatic complaints, anxiety, depression, and perceptions of patterns of vaginal bleeding.
When compared with a MPA-containing regimen, women using NP-containing HRT experienced significant improvement in symptoms and 80% reported overall satisfaction¹⁷

See attached Table 1.
TABLE 1

Medroxyprogesterone Acetate (MPA) Versus Natural Progesterone (NP)

<table>
<thead>
<tr>
<th>Category</th>
<th>MPA</th>
<th>NP</th>
</tr>
</thead>
<tbody>
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<td>has been found to cause deterioration of glucose tolerance or hyperinsulemia or both</td>
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<td>Bone</td>
<td>may decrease bone density as much as 5-6%</td>
<td>stimulates osteoblasts, bone-trophic</td>
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<td>Quality of Life/ Menopausal Symptoms</td>
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</tbody>
</table>
References

¹ The Writing Group for the PEPI Trial; Effects of Estrogen or Estrogen/Progestin Regimens on Heart Disease-Risk Factors in Postmenopausal Women; JAMA, Jan 1995; 273:3;199-208.


³ Bolaji, et.al. Low-dose progesterone therapy in oestrogenised postmenopausal women; effects on plasma lipids, lipoproteins and liver function parameters; EUROBS, 48 (1993) 61-68.


