

Is a combination the answer for severe osteoporosis?

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- **Is it a good idea to give more than one medication for a severe case of osteoporosis?**

Question submitted by
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Response:

A number of agents, designed to increase bone mineral density (BMD) and reduce the risk of fractures, are available for the treatment of post-menopausal osteoporosis. Whether combination therapy is effective in reducing the risk of fracture is uncertain.

Over the last decade, a few studies were published involving combination therapies:

- hormone replacement therapy (HRT) and bisphosphonates (alendronate, risedronate, cyclicetidronate);
- raloxifene and alendronate; and
- HRT and calcitonine.

These studies showed that combination therapy increased BMD more than monotherapy.

However, none of these studies are of sufficient power to establish whether combination therapy has a greater anti-fracture efficacy than monotherapy.

Oversuppression of bone turnover, as a result of combination therapy, is a potential concern. Abnormally low bone turnover may result in increased brittleness and reduced strength, which would lead to an increase in fractures.

A recent study on the effect of parathyroid hormone (PTH) and alendronate, alone or in combination in post-menopausal osteoporosis, concluded that alendronate or PTH monotherapy is better than a combination. This suggests that concurrent use of alendronate may reduce the anabolic effect of PTH.

Furthermore, combination therapy involves an inherent cost implication and is likely to be associated with an increased prevalence of side-effects.

Thus, the use of combination therapy for the treatment of osteoporosis cannot be recommended on the basis of the currently available evidence.

Answered by:
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