

primary studies - published RCT

## **Efficacy of pamidronate for osteoporosis in patients with cystic fibrosis following lung transplantation.**

**Code:** PM10988110    **Year:** 2000    **Date:** 2004

**Author:** Aris RM

### **Study design (if review, criteria of inclusion for studies)**

RCT

### **Participants**

Patients were invited to participate if they had a BMD Z score of -1 or less in the lumbar spine, proximal femur or distal forearm. 15 CF patients and 15 controls

### **Interventions**

calcium 1 g+vitamin D 800 IU or placebo daily, in addition to their regular vitamin D supplements (900 IU/day).

### **Outcome measures**

BMD and bone biochemical markers were measured before and after 1 year of treatment.

### **Main results**

After 12 months, the treatment group showed a reduced rate of bone loss compared with the control group in the lumbar spine (mean difference 1.9% [CI -0.9% to 4.6%]), total hip (mean difference 0.7% [CI -2.2% to 3.5%]) and distal forearm (mean difference 1.7% [CI -2.2% to 5.5%]), but these changes did not reach statistical significance. There was also a trend towards a reduction in bone turnover in the treatment group.

### **Authors' conclusions**

Calcium and vitamin D supplementation reduced the rate of bone turnover and bone loss in adult patients with cystic fibrosis, but these changes did not reach statistical significance. These data suggest that a longer term trial of this simple intervention would be justified.

### **See also**

Am J Respir Crit Care Med. 2000 Sep;162(3 Pt 1):941-6.

### **Keywords**

Adolescent; Adult; Bone Density Conservation Agents; Bone Diseases; Calcium; Oral; pharmacological\_intervention; placebo; Supplementation; vitamins; Vitamin D; Vitamins; Minerals;