

CHAPTER VI

CONCLUSION AND RECOMMENDATION

Muscle strength declined with age in ambulatory elderly women. Vitamin D deficiency appears to contribute to age-related loss of muscle strength in this population. However, it could not demonstrate a statistically significant correlation between the serum level of 25(OH) D₃ and muscle strength in our study. But, our experimental study clearly demonstrated the improvement of muscle strength after administration of alfacalcidol, at least, in elderly women age equal or more than 65 years who have low serum level of 25(OH) D₃ [25(OH)D₃ ≤ 30 ng/ml]

Hypovitaminosis D may have a significant contribution to the fall and fractures in this elderly population, especially who already have osteoporotic bone. Our prevention and treatment regimens for osteoporotic elderly women in Thailand usually have no routinely vitamin D supplementation. The result of this study, as well as others, has shown a higher than expect of the percent of the hypovitaminosis D. Routinely administration of vitamin D to the regimen in prevention of osteoporotic non-vertebral fractures especially in elderly women in Thailand should perform.