

**VITAMIN D LEVELS  
IN IMMOBILIZED  
SPANISH ADULTS.  
THE CAMARGO  
COHORT STUDY**

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# OBJECTIVE

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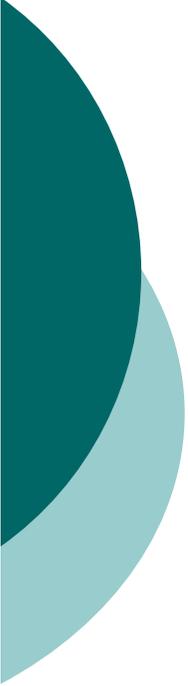
- To determine serum 25-Hydroxivitamin D (25OHD) and intact parathyroid hormone (PTH) levels in an immobilized population from northern Spain



## PATIENTS AND METHODS

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- A total of 125 immobilized people (37 men and 88 women) aged 53 to 101 yrs. ( $85 \pm 8$  yrs.) were studied
- Seventy-five percent of the subjects lived at home, the remaining 25% residing in nursing homes



## PATIENTS AND METHODS

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- None of the patients received antiresorptive therapy, corticosteroids or vitamin D supplements
- Serum 25OHD and PTH levels were measured by the Elecsys 2010 automated analyzer (Roche)



# RESULTS

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- Median 25(OH)D and PTH values are shown in table 1
- 25OHD levels were similar in both sexes
- People who lived at home had a 25OHD concentration greater than nursing home residents



# RESULTS

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- PTH levels were also similar in both sexes and no differences were seen between people living at home and nursing home residents
- Fifty-six percent of the subjects had values over 65 pg/ml (the upper limit of normality)

# RESULTS

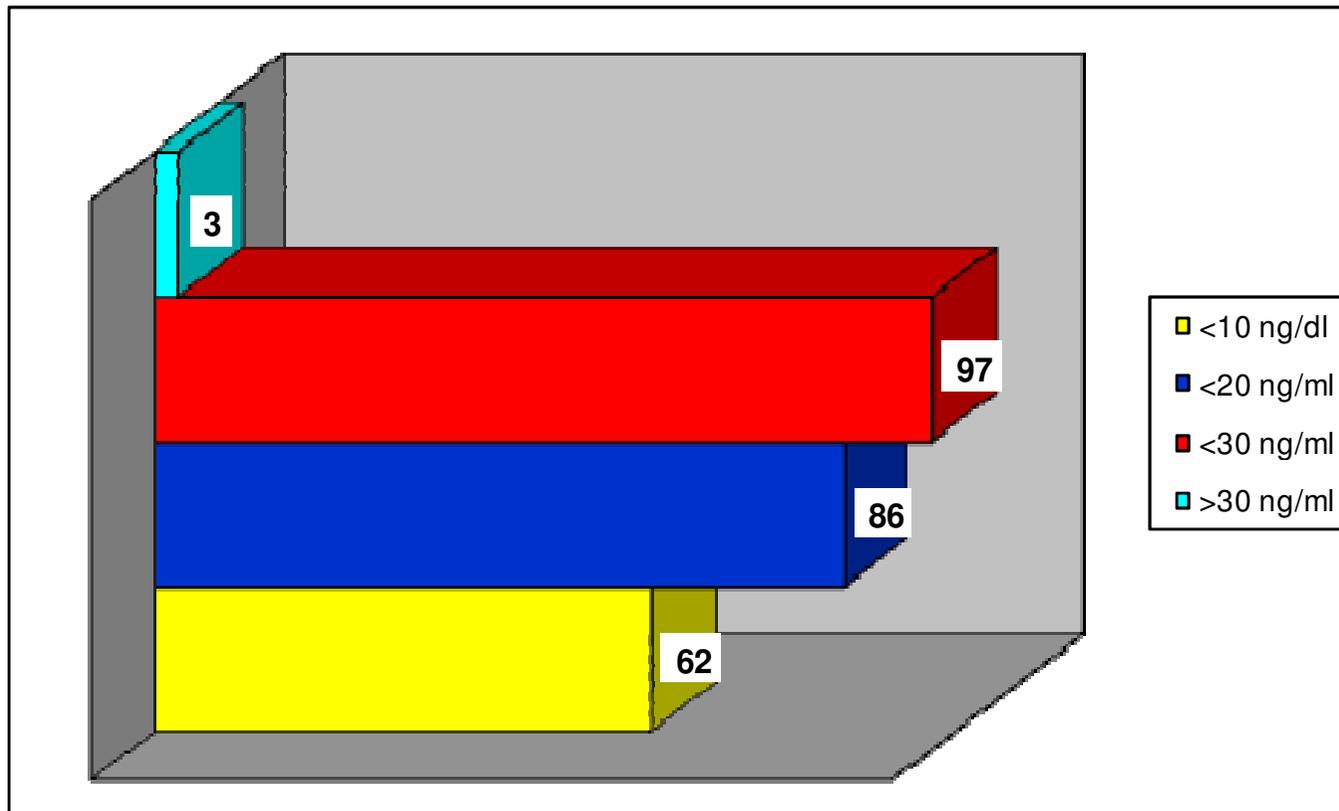
**Table 1. Vitamin D and PTH levels in immobilized patients**

	Total (125)	At home (93)	Nursing home (32)
Age	85 ± 8	85 ± 9	84 ± 7
Sex (M/F)	30/70%	27/73%	37/63%
25(OH)D (ng/ml)	10.4 [4.4-13.9]	11.4 [5.2-17.0]	7.5 [3.2-10.3]*
PTH (pg/ml)	80.5 [49.3-92.7]	79.4 [50.4-90.5]	83.5 [47.6-102.4]

\* p<0.01

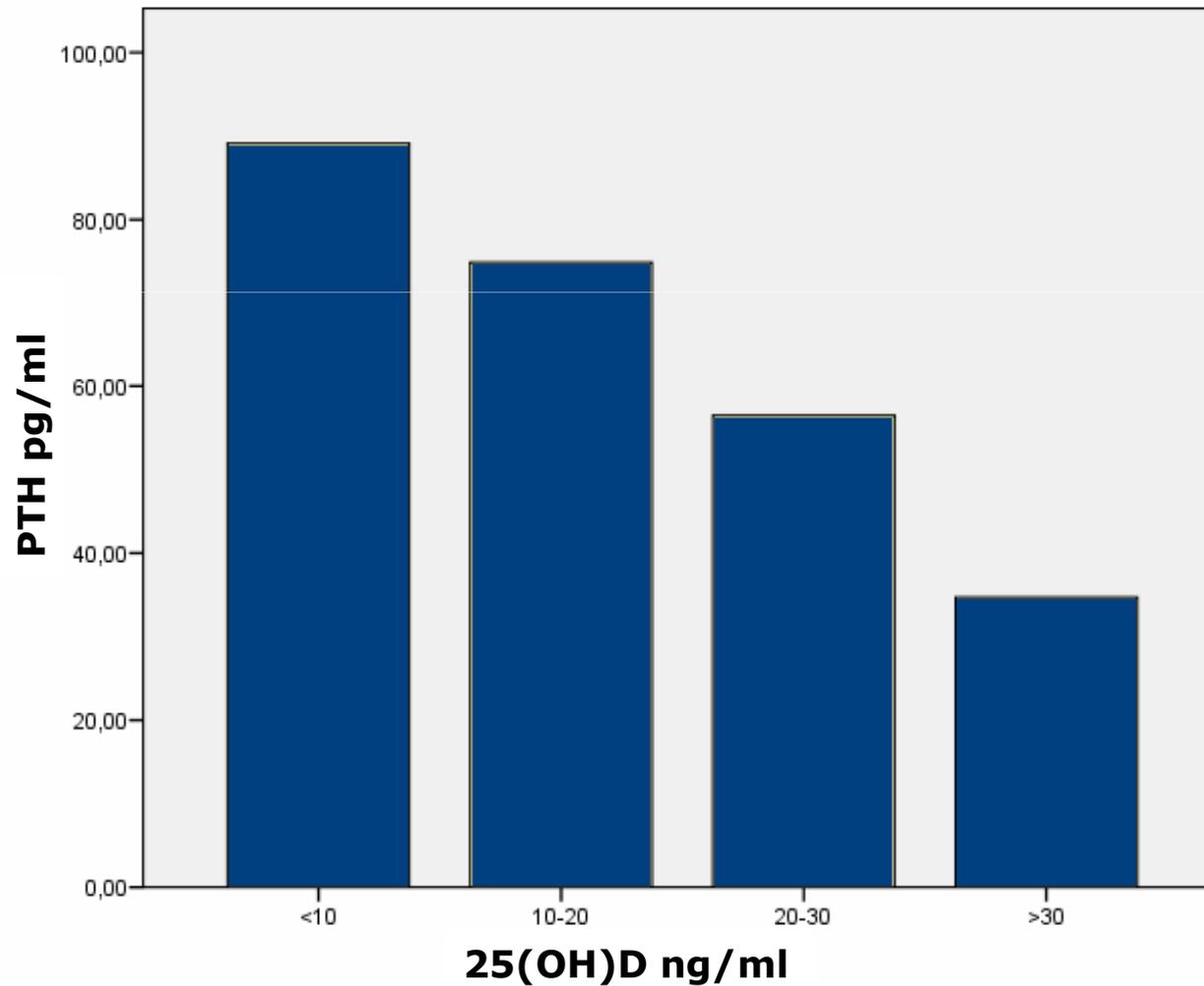
# RESULTS

**Figure 1. Prevalence of Vitamin D insufficiency and deficiency in immobilized patients**



# RESULTS

**Figure 2. Mean PTH values in the different strata of vitamin D**





# CONCLUSIONS

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- Vitamin D insufficiency and deficiency are very common among Spanish immobilized adults
- Mean PTH levels lie around 80 pg/ml, a value that is above the upper limit of normality for this hormone