VITAMIN D LEVELS IN IMMobilized SPANISH ADULTS. THE CAMARGO COHORT STUDY
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OBJECTIVE

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

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

- 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

○ 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

- 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

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

* 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

![Graph showing PTH values in different strata of 25(OH)D ng/ml](image)
CONCLUSIONS

- 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.