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Vitamin D deficiency may explain the link between back pain and erectile

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To the Editor:

The recent paper by Deyo and colleagues reported significant direct correlation between use of medications for erectile dysfunction and use of opioids for back pain. No reason was given to

explain the link. A possible link is vitamin D deficiency. A study in Minnesota found that persistent, nonspecific musculoskeletal pain was associated with hypovitaminosis D (mean serum 25-hydroxyvitamin D [25(OH)D] = 12.1 ng/ml).<sup>2</sup> About half of erectile dysfunction is related to vascular problems. A recent paper hypothesized that since vitamin D deficiency is an important risk factor for cardiovascular disease, it was also very likely a risk factor for erectile dysfunction.<sup>3</sup>

Oregon has sunny locations inland and cloudy locations along the coast. One way to check the vitamin D deficiency hypothesis is to see whether back pain and erectile dysfunction rates are higher in the cloudy locations. Another way is to obtain serum 25(OH)D level data for those using opioids for back pain and those being treated for erectile dysfunction. Both conditions might be resolved by raising serum 25(OH)D levels to above 30-40 ng/ml, which could take 1000-4000 IU/d vitamin D3.

## References

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