Chronic obstructive pulmonary disease is a strong independent risk factor for osteoporosis and pathologic fractures: a population-based cohort study

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Dear Editor,

We used the National Health Insurance Research Database to demonstrate that chronic obstructive pulmonary disease was significantly associated with a high risk of osteoporosis, regardless of whether the patients with chronic obstructive pulmonary disease (COPD) were corticosteroid users and irrespective of age and sex.1 We discussed the association between chronic lung diseases and osteoporosis, so the study included the patients with diagnoses of International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) codes: 490–496. We have revised chronic obstructive pulmonary disease and allied conditions as ‘COPD’.

The Taiwanese National Health Insurance 1999–2001 data showed that the diagnosis of osteoporosis in adults over the age of 50 was underestimated.2 The National Nutrition Survey in Taiwan reported that, for men and women over the age of 50, the prevalence of osteoporosis respectively was 23.9 and 38.3%.3

Our results revealed that COPD was significantly associated with a high risk of osteoporosis. The underestimated diagnoses of osteoporosis are equal in COPD group and non-COPD group. So, we still thought that patients with COPD have higher risk of osteoporosis.

In ICD-9-CM codes, there are different codes for COPD and acute exacerbation of COPD (AECOPD). We used 490-496 as COPD and 491.21 as AECOPD. We analyzed the number of emergency room visits and admissions for AECOPD. We corrected our error in Figure 1 of Lin and Pan,3 that the N is corrected to N = 1 000 000.1

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References

