CASE REPORT

A 50 year-old male patient was admitted in casualty with dyspnea and wheezing. He works laboriously in the coal mine shafts and had a social history of smoking for 5 years. His clinical history was seen with troubled breath during strenuous physical action from the past 1 year and quitted smoking in the past prescription was started. After the suspension of alendronate, he had no complaints for the following 3 weeks. As the patient was unaware of his respiratory distress because of alendronate. After the second dose of alendronate, he again experienced dyspnea and wheezing within few hours and was admitted to the emergency department. Based on his readministered alendronate information and respiratory symptoms, he was restarted with albuterol and intravenous hydrocortisone. Within the very early hours of effective treatment, hypoxemia resolved.

DISCUSSION

This is a bizarre and uncommon case report of alendronate-induced respiratory distress. As per the Naranjo probability scale, alendronate was a reasonable justification for the patient's respiratory trouble right now [4]. Although no direct causal relationship can be drawn from this report, the relationship between the alendronate use and the beginning of the respiratory distress was promptly accepted because of alendronate, particularly with given consequences of an unfortunate rechallenge.

In the literature, there are a few published reports about alendronate that typically show a dose-dependent rise of histidine decarboxylase movement in different tissues (e.g., liver, lung, and spleen), prompting an expansion in histamine [5-7]. One of the other studies exhibits that basophils of selected patients with hypersensitive bronchopulmonary aspergillosis have marked cell hyperreactivity and patients with allergic bronchopulmonary aspergillosis had significantly more prominent histamine release to Aspergillus antigens [8]. This conversation result proposes a potential mechanism for worsening of an inflammatory reaction like respiratory distress because of histamine release [6] with...
the cause of allergic bronchopulmonary aspergillosis [8]. The patients with allergic bronchopulmonary aspergillosis were typically revealed with basophilia and raised serum immunoglobulin in a study [8] and the same was recognized in this case report.

The above literature discussion may have played a role in the patient, but no single factor was likely solely responsible for the key development of respiratory distress. Esophageal irritation can typically cause stimulation of the vagal nerve at the inferior site of the esophagus, which can also lead to bronchoconstriction [9].

CONCLUSION

This uncommon occurrence of respiratory trouble may reveal precisely insight with expanded use of alendronate. The clinical significance and possible mechanism of this rare adverse reaction are still to be understood clearly. Clinicians ought to know that alendronate can cause an assault in patients with respiratory distress.

AUTHORS’ CONTRIBUTIONS

Pravalika M and Srivani V have efficiently performed the manuscript draft. Dr. Sagar Pamu has detected the ADR case report, collected from the hospital, carefully revised, and edited the drafted manuscript.

CONFLICTS OF INTEREST

No authors are undoubtedly having any conflicts of interest in regard to this article publication.

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