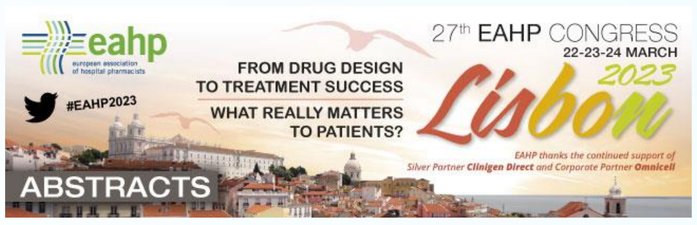
MEDICATION-RELATED OSTEONECROSIS OF THE JAWS AND CDK4/6 INHIBITORS

Domínguez Senín L [1], Morales Pancorbo D [2], Rodríguez Garcés MY [2], Rodríguez Jorge M [1], Santos-Rubio MD [1], Bayo Calero J [2].
1 Hospital Universitario Juan Ramón Jiménez, Pharmacy Department. Huelva. Spain.
2 Hospital Universitario Juan Ramón Jiménez, Oncology Department. Huelva. Spain.



5PSQ-026

BACKGROUND AND RELEVANCE

Medication-related osteonecrosis of the jaw (MRONJ) is a relatively uncommon but serious complication of osteoclast inhibitors therapy with intravenous bisphosphonates and denosumab. Dose, schedule, and duration of inhibition are associated with MRONJ risk. Marcianò et al.[1] launched an alert about a possible association between MRONJ and cyclin-dependent kinase (CDK)4/6 inhibitors in breast cancer patients with osteoclast inhibitors therapy.

AIM AND OBJETIVES

Evaluate the use of CDK4/6 inhibitors as a risk factor for MRONJ in our cohort of patients with metastatic cancer and denosumab

MATERIALS AND METHODS

Retrospective observational study. All patients with denosumab (January 2011-February 2022) were included. Cases of MRONJ found were described. Relationship between CDK4/6 inhibitors and MRONJ was analysed with a Chi-square analysis.

RESULTS

363 patients with denosumab were included. 21 cases of MRONJ were detected: 62.5% women, 57.1%(12/21) with breast cancer, 19%(4/21) prostate cancer, and 9.5%(2/21) lung cancer. 42.9% with extraosseous metastases. Median treatment duration for denosumab was 19 months (1-52). 7 with a CDK4/6 inhibitors (3 palbociclib, 2 abemaciclib and 2 ribociclib). Median treatment duration with CDK4/6 inhibitors was 27 months (10-35). The mean time from the start of denosumab to the appearance of the event was 23 months (16-29). Incidence of this complication in patients treated with denosumab but without CDK4/6 inhibitors was 5.24% (14/267) and 7.29% (7/96) in patients with denosumab and a CDK4/6 inhibitor. Although the group with CDK4/6 inhibitors had a higher incidence of MRONJ cases, the difference was not significant (0.461).

CONCLUSION AND RELEVANCE

The incidence of MRONJ in our cohort of patients with metastatic cancer and denosumab was higher in the group of patients with CDK4/6 inhibitors. However, this difference was not significant. Our data are somewhat higher than those reported in the literature according to which the risk of MRONJ with denosumab is 1.1% during the first year, 3.7% the second year and 4.6% per year thereafter. Studies with more patients would be necessary to confirm the relationship between the use of CDK4/6 inhibitors and MRONJ.

REFERENCES

1. Marcianò, A.; Guzzo, G.M.; Peditto, M.; Picone, A.; Oteri, G. Medication-Related Osteonecrosis of the Jaws and CDK4/6 Inhibitors: A Recent Association. Int. J. Environ. Res. Public Health 2020, 17, 9509.