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Abstract Submission FORM

REPORTING OF MRONJ CASES TO ITALIAN SYSTEM OF PHARMACOVIGILANCE (AIFA): A 18-YEAR MONOINSTITUSTIONAL EXPERIENCE

SECTION: *1A*

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Background. Medication Related Osteonecrosis of Jaw (MRONJ) is a side effect of drugs administered to patients with cancer, myeloma, and non malignant diseases (osteoporosis, rheuematic and autoimmune disorders, etc) since 2003[1].
Reporting of observed side effects of drugs is recommended by international and national authorities. "Signals" of suspected adverse reactions (not necessarily ascertained) is based on spontaneous reporting, aimed to identify unknown reactions or increase of known side effects. The WHO (World Health Organization) Program for International Drug Monitoring was established in 1968, and Italy joined it in 1975. In 1995 EMA (European Medicine Agency) was created, followed in 2001 by Eudravigilance (first European data bank for adverse drug reactions). In Italy the national Rete Nazionale di Farmacovigilanza (RNF) joined Eudravigilance in 2006.
The increase of reporting of cases of osteonecrosis of jaw related to bisphosphonates (BRONJ) induced Italian authorities in 2009 to modify the documents linked to bisphosphonates, and to release strict national recommendation[2].
After a first online platform (Vigifarmaco, 2017-2022), a new online reporting system was introduced on AIFA (Agenzia Italiana del Farmaco) website since June 2022.
In spite of a large number of MRONJ cases illustrated in papers and congresses, the reporting of MRONJ cases to AIFA vigilance system appears insufficient to draw consistent analyses.
Patients and methods. We reviewed cases of ascertained MRONJ, reported by professional figures of Alessandria Hospital to the Italian pharmacovigilance system in 2005-2023 years.
Results. We reported to AIFA drug surveillance system 89 MRONJ cases.of confirmed MRONJ, found among patients receiving treatment including bisphosphonates and/or denosumab and/or antiangiogenics drugs., Sex: 38 M, 51 F. Median age at MRONJ diagnosis time: 69 years. Status at January 2024:27 alive, 62 dead. Patient disease: 31 breast cancer / 22 prostate cancer / 6 myeloma / 6 renal cell cancer / 6 lung cancer / 4 other cancers / 14 osteoporosis and other non-malignant disorders.
MRONJ patients received one drug or sequence of drugs potentially inducing the side effect:
a) "low dose" bisphosphonates (alendronate, risedronate, clodronate; ibandronate for osteoporosis; yearly 5 mg zoledronic acid) and/or "low dose" denosumab (60 mg every 6 months): 14 cases
b) "high dose" bisphosphonates (pamidronate, 4 mg zoledronic acid, ibandronate at doses for metastatic disease) and/or "high dose" denosumab (120 mg monthly): 72 cases
c) antiangiogenic agents alone (sunitinib, bevacizumab, etc): 3 cases
A combination of bisphosphonates and/or denosumab with antiangiogenic agents in many cancer cases.
Analyzed for reporting year: 24 in 2005-2009, 36 in 2010-2014, 21 in 2015-2019, 8 in 2020-2023.
Conclusions. Our hospital reported a mean of 5 MRONJ cases per year.
Immediate and timely reporting of MRONJ cases was not always easy (due to variable modality of diagnosis process, based on both clinical and radiological examination).
Even delayed reporting is allowed and recommended in any case (although at risk of false "clusters" of reported cases).

REFERENCES:

1. *Bedogni et al Oral Diseases 2024*
2. *Ministero della Salute: raccomandazione n.10 "Prevenzione dell'osteonecrosi della mascella/mandibola da bifosfonati" contenenti le indicazioni per la prevenzione di questo effetto indesiderato. 2009.*

Il titolo non deve essere superiore a 130 caratteri (spazi inclusi); l'abstract deve essere scritto in Times New Roman carattere 10. Numero minimo di parole: 400 inclusi titoli, autori e affiliazioni; numero massimo di parole: 600 inclusi titoli, autori e affiliazioni. Inserire al massimo 3 note bibliografiche. L'abstract (tutto in inglese titolo e testo) deve essere contenuto all'interno della prima pagina del form.