

Denosumab and osteonecrosis of the jaw

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I wish to remind readers of the association between bisphosphonates and osteonecrosis of the jaw.¹ I am concerned that the clinical trial data supporting the approval of injectable denosumab in Australia,² for treating osteoporosis in postmenopausal women, may have underestimated the risk of osteonecrosis.

The main placebo-controlled trial involved more than 7000 osteoporotic postmenopausal women aged between 60 and 90 years. The diagnosis of osteoporosis was defined as a bone mineral density T-score of less than minus 2.5 at the lumbar spine, hip or both. Women were excluded from the trial if they had taken an oral bisphosphonate for more than three years.³

After 36 months, osteonecrosis of the jaw had not been reported in the active treatment group of almost 4000 women. However, this result cannot be extrapolated to the large cohort of Australian women who have taken oral bisphosphonates for more than three years. These drugs have been widely prescribed for more than 20 years so there is a large cohort of women potentially at risk.

The incidence of osteonecrosis of the jaw in women given denosumab after prolonged exposure to oral bisphosphonates is unknown. Until this is determined, the risk of developing osteonecrosis

of the jaw should be assumed to be higher than in women not previously exposed to bisphosphonates. There is a suspicion that dentists and oral surgeons under-report osteonecrosis of the jaw as an adverse drug reaction. This may possibly be for fear of claims of negligence if osteonecrosis follows a dental procedure.

I believe prescribers have a responsibility to warn of osteonecrosis of the jaw when obtaining consent to prescribe denosumab to patients who have been exposed to oral bisphosphonates for more than three years. These patients should be referred for a dental assessment before starting denosumab. They should also inform their dentist if they are taking or have previously taken bisphosphonates.

Osteonecrosis of the jaw can be a debilitating and disfiguring condition. Life is difficult without a mandible.

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