### The National Dental Practice-Based Research Network The nation's network

## Dental Care for Patients Taking Bone Protecting Drugs

Many people with osteoporosis (weak bones) take medications, called bisphosphonates, which help reduce their risk of having a bone fracture. People with osteoporosis commonly take bisphosphonates in a pill, while cancer patients often receive a high-dose injection.



Your dentist is part of the National Dental Practice-Based Research Network, a group of dental practices that treat patients and also

do dental research. For more information go to www.nationaldentalpbrn.org.



#### Risks for a rare condition: osteonecrosis of the jaw (ONJ)

ONJ is a rare disease in which an area of the jaw bone starts to die because it's not getting enough blood. Researchers and dentists in the National Dental Practice-Based Research Network conducted two studies to determine the chance that someone will have ONJ, and what factors may increase these chances, such as oral bisphosphonates.



# Findings from the studies show that ONJ is very rare, but bisphosphonates increase the risk of developing it.

- In a study of 572,000 dental patients, only 23 patients had ONJ (about 4 per 100,000 patients).
- The risk of ONJ was 9 to 12 times greater for study participants who took bisphosphonates than for those who didn't.
- Only 6 of the 23 ONJ patients had taken oral bisphosphonates.
- A study of 191 ONJ patients showed that the stronger the bisphosphonate dose the greater the ONJ risk.
- Having a tooth pulled also increased the risk of developing ONJ.

#### What to do



Talk with your dentist if you currently take or are planning to take bisphosphonates for your bone health. If possible, address any existing dental care needs before beginning bisphosphonate treatment.

Do not avoid dental care if you currently take bisphosphonates, since your risk of ONJ following dental surgery is very low.

Protect your bones:

- Eat foods rich in calcium and vitamin D.
- Do plenty of strength-building and weight-bearing exercises, such as walking, climbing stairs, lifting weights, and dancing.
- Do not use tobacco.
- If you drink alcohol, drink in moderation.

More information on protecting your bones is at the National Institute of Arthritis and Musculoskeletal and Skin Diseases www.niams.nih.gov/Health\_Info/Bone/.

References: Woo SB, Hellstein JW, Kalmar JR. Systematic review: bisphosphonates and osteonecrosis of the jaws. Annals of Internal Medicine 2006;144(10):753-761.

Fellows JL, Rindal DB, Barasch A, Gullion CM, Rush W, Pihlstrom DJ, Richman J. ONJ in two Dental Practice-Based Research Network Regions. Journal of Dental Research. 2011;90(4):433-438.

Barasch A, Cunha-Cruz J, Curro FA, Hujoel H, Sung AH, Vena D, Voinea-Griffin AE; CONDOR Collaborative Group, et al. Risk factors for

osteonecrosis of the jaws: a case-control study from the CONDOR Dental PBRN. Journal of Dental Research. 2011;90(4):439-444.

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To ensure excellent dental care, the Network carries out our studies in real-world settings—like your dentist's office—with regular patients like yourself who volunteer to participate. The studies wouldn't be possible without the involvement of our wonderful patients. Thanks to everyone who participated in this and all of our studies!