Giant Cell Tumor of Bone Reply

Heijden, L. van der; Dijkstra, P.D.S.; Sande, M.A.J. van de; Kroep, J.R.; Nout, R.A.; Rijswijk, C.S.P. van; ... ; Gelderblom, H.

In Reply

We thank Cavanna et al. for sharing their interesting observations and remarks [1] concerning our clinical guidance paper on giant cell tumor of bone (GCTB) in the era of denosumab [2]. We also would like to take the opportunity to update our paper with respect to the recent positive opinion, dated July 25, 2014, of the European Medicines Agency's Committee for Medicinal Products for Human Use recommending denosumab for the treatment of adults and skeletally mature adolescents with GCTB that is unresectable or for which surgical resection is likely to result in severe morbidity [3].

Regarding the case report of Cavanna et al. [1], the apparently asymptomatic GCTB was detected through a fluorodeoxyglucose F 18 (^{18}F-FDG) positron emission tomography (PET) scan while staging a melanoma. GCTB is often PET positive, as mentioned in our paper [2]. In this particular case, additional imaging and an open biopsy led to the final diagnosis.

What we can learn from their report [1] is that in cases of screening for metastases in a highly malignant tumor, such as melanoma, an ^{18}F-FDG PET-positive lesion is not always a metastasis. In this rare case, an asymptomatic PET-positive GCTB could mimic a metastasis. Further imaging and histology of the PET-positive lesion is always warranted to confirm or exclude metastatic disease and led to the correct diagnosis. That said, we believe that despite the fact that ^{18}F-FDG PET is generally positive in GCTB, this should not be routinely recommended in the initial diagnosis of GCTB because conventional imaging plus histology is sufficient for clinical decision making.

We also would like to emphasize that an open biopsy, as used in the case report by Cavanna et al. [1], is not our first choice for GCTB. We have shown that the high accuracy of the core needle biopsy, combined with the advantages of this technique over the incisional surgical biopsy, makes it a safe, fast, and adequate technique for obtaining a histologic sample of a bone tumor [4]. The European Society for Medical Oncology guidelines also state that, in many situations, core needle biopsies (preferably taken under imaging control) are an appropriate alternative to open biopsy [5].

Lizz van der Heijden
P.D. Sander Dijkstra
Michiel A.J. van de Sande
Department of Orthopedic Surgery, Leiden University Medical Center, Leiden, The Netherlands

Judith R. Kroep
Remi A. Nout
Department of Clinical Oncology, Leiden University Medical Center, Leiden, The Netherlands

Carla S.P. van Rijswijk
Department of Radiology, Leiden University Medical Center, Leiden, The Netherlands

Judith V.M.G. Bovée
Pancras C.W. Hogendoorn
Department of Pathology, Leiden University Medical Center, Leiden, The Netherlands

Hans Gelderblom
Department of Clinical Oncology, Leiden University Medical Center, Leiden, The Netherlands

Disclosures

P.D. Sander Dijkstra: Implantcast BV, Germany (RF). The other authors indicated no financial relationships.

(C/A) Consulting/advisory relationship; (RF) Research funding; (E) Employment; (ET) Expert testimony; (H) Honoraria received; (OI) Ownership interests; (IP) Intellectual property rights/inventor/patent holder; (SAB) Scientific advisory board

References

1. Cavanna L, Biasini C, Monfredo M et al. Giant cell tumor of bone. ***The Oncologist*** 2014;19:1207.

2. van der Heijden L, Dijkstra PDS, van de Sande MAJ et al. The clinical approach toward giant cell tumor of bone. ***The Oncologist*** 2014;19:550–561.

3. Meeting highlights from the Committee for Medicinal Products for Human Use (CHMP) 21-24 July 2014. Available at http://www.ema.europa.eu/ema/index.jsp?curl=pages/news_and_events/news/2014/07/news_detail_002142.jsp&mid=WC0b01ac058004d5c1. Accessed August 20, 2014.

4. van der Bijl AE, Taminiau AH, Hermans J et al. Accuracy of the Jamshidi trocar biopsy in the diagnosis of bone tumors. Clin Orthop Relat Res 1997: 233–243.

5. ESMO/European Sarcoma Network Working Group. Bone sarcomas: ESMO clinical practice guidelines for diagnosis, treatment and follow-up. Ann Oncol 2012;23(suppl 7):vii100–vii109.

http://dx.doi.org/10.1634/theoncologist.2014-0332