Answer to the Letter to the Editor of Huilin Yang et al. concerning manuscript “Percutaneous augmented instrumentation of unstable thoracolumbar burst fractures”, Eur Spine J, 2011 Dec 8 [doi:10.1007/s00586-012-2278-z], by N. Rahamimov et al.

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Controlling cement leakage is indeed an important technical consideration when performing any type of vertebral augmentation, even though the consequences of such leakage are often more radiographic than clinical [1].

We appreciate the important technical tips provided in this letter and are certain of their efficacy. Unfortunately, two-stage cementing is not a viable option when augmenting an intact vertebra to prevent screw pullout, and other measures are needed to address this issue.

Following our experience described in this article, we have slightly changed the surgical technique. Today, we use fenestrated screws through which the PMMA is injected after screw insertion, thus enabling the use of smaller volumes of cement, in a more viscous phase.

Another change we have instituted is to pre-heat the PMMA to approx 50 °C, and not rely on ambient operating room temperature to cure it. Pre-heating the cement not only shortens wait times in the operating room but also changes the physical properties of the semi-cured cement, making it more viscous, and the fully-cured cement more

porous and adherent [2, 3]. This is beneficial in cementing both intact and fractured vertebrae.

We are currently collecting our data, but the general impression is that these measures have reduced the leakage rate considerably.

Conflict of interest None.

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