Regarding Elastoplasty: A Silicon Polymer as a New Filling Material for Kyphoplasty in Comparison to PMMA

To the Editor:

With interest we read the article in the most recent version of Pain Physician titled “Elastoplasty: A Silicon Polymer as a New Filling Material for Kyphoplasty in Comparison to PMMA” (1). In this “difficult era” for vertebroplasty and/or kyphoplasty, new and innovative cements are a highly interesting field of research. The authors report promising clinical data with reduction in pain at least comparable or slightly better with the use of VK100 compared to polymethylmethacrylate (PMMA) as augmentation material for balloon kyphoplasty. Leakage and migration of “cement” is a known complication in vertebral augmentation techniques. The authors report a nonsignificant difference of leakage in the VK100 group of 13.3% versus 6.7% in the PMMA group. As stated by the authors, no computed tomography (CT) scan was done due to high radiation exposure. A CT scan should only be conducted for symptomatic patients, so diagnosis of cement leakage was done on fluoroscopy or x-ray images. However, detection of cement leakage and migration as known is more easily detectable on a CT scan. In 2012 we reported our experience with Elastoplasty with VK100 in twelve patients (2). In the first several patients treated, we subjectively experienced more leakage during treatment with VK100 than we were used to with PMMA, and therefore decided to do a CT chest and spine in the patients treated with VK100. Evaluating the postprocedure CT scans, we found a high incidence of pulmonary emboli in 60% of the patients. At that time we decided to discontinue the use of VK100 as vertebral augmentation material. We admit that of course for all new procedures there is a learning curve and that handling of VK100 is fully different from PMMA, which can influence our “first” clinical data, however training and proctoring had been given to us by the distributor. We think that before VK100 can be used widespread, more safety data regarding leakage, handling (and training) should be collected to support the promising clinical data for VK100 as a new augmentation material for vertebroplasty and/or (balloon) kyphoplasty.

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References:

