Opinion: Limiting Treatment of Patients with Painful Vertebral Compression Fractures is Not Okay

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Since a conference call with a Medicare Administrative Contractor (MAC) on March 20, 2019 we have been dealing with the contents of the new Medicare Local Coverage Determination (LCD) for vertebral augmentation (VA), the requirements for treating patients with painful vertebral compression fractures (VCFs). The initial LCD that was released had no resemblance to what was discussed on the conference call and was almost diametrically opposed to the expert opinion offered on that call.

Some of the subsequent iterations of the LCD have included such unsubstantiated things as excluding subacute VCFs and requiring a multidisciplinary team consensus decision to treat prior to performing VA. Never mind the fact that there are hundreds of articles and dozens of control trials supporting the treatment of painful subacute VCFs and that the multidisciplinary team included Neurologists that have never ever been involved with the treatment of VCFs. One of the other suggestions was to try periosteal infiltration of the pedicle for a painful VCF regardless of a complete lack of literature support for this. There were also other suggestions to limit the number of fractures treated to three and to have edema present on STIR images as a requirement for treatment. The bottom line is that almost none of these suggestions have any consistent literature basis for making them and, if included in the LCD, would have the downstream effect of limiting the number of VA procedures performed.

We have actually looked at what happens when fewer people have their painful VCFs treated when we examined the effect on patient mortality after the downward trend in treatment caused by the 2009 vertebroplasty versus sham articles published in the New England Journal of Medicine (1 – 3). We found that over 75,000 people were at increased risk of death and over 6,800 people demonstrably lost their lives from the complications of the deconditioning caused by their VCF. Consistently other manuscripts have shown significantly increased mortality from patients who are treated with non-surgical management (NSM) for their VCF rather than treated with VA. We calculated the number needed to treat to save a life at one year from the mortality analysis data and found that it was only 15 patients to save one life at one year and even less (12 patients) to save a life at

five years. What else do you do in your practice that saves one life for every 12 to 15 patients you treat? A meta-analysis was published this year that shows a 10 year decreased mortality rate of 22% for those patients treated with VA versus those patients "treated" with NSM and a earlier meta-analysis shows that the patients' life expectance was increased between 2.2 and 7.3 years after VA compared to their NSM counterparts (4, 5)

Maybe the lack of importance ascribed to a spine fracture as compared with a hip fracture is due to the fact that patients can walk with a spine fracture and can't walk with a hip fracture but the risk of morbid injury and death are absolutely comparable (6). This high mortality risk is in addition to the fact that vertebral fractures cause tremendous pain and disability.

Instead of focusing on unsubstantiated ideas that the unknown authors of the LCD produced which would certainly make the treatment of painful VCFs more difficult, I would propose using current literature evidence to guide optimal fracture treatment. We should also keep in mind that limiting a treatment that has been shown to be life sustaining and life prolonging is highly likely to be a very bad idea that will cost lives and cause morbid suffering. It may have been okay to try to limit the treatment a couple of decades ago when we didn't know the repercussions of painful VCFs but now we do and treatment limits are no longer okay.

References

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