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LETTER

Awareness of Drug–Drug Interaction in Elderly Patients with Osteoarthritis and Depression [Letter]

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Dear editor

We read with great interest the study by Wang et al,[1] which direct health care providers' attention to the co-occurrence of depression and osteoarthritis (OA). We especially appreciate the viewpoint that clinicians should implement an individualized and comprehensive treatment plan for osteoarthritic patients with depression. However, we found one point worthy of discussion and we would like to share our perspectives in the following paragraphs.

The following serotonergic antidepressants are commonly prescribed as a treatment for neuropathic pain or depression in orthopedic outpatient clinics and pain management clinics: tricyclic antidepressants (eg, amitriptyline), selective serotonin reuptake inhibitors (eg, citalopram, escitalopram, fluoxetine, paroxetine, sertraline, fluvoxamine), serotonin and norepinephrine reuptake inhibitors (eg, duloxetine and venlafaxine). However, clinicians should pay attention to the potential of drug–drug interaction (DDI) between antidepressant and analgesic in OA patients. Tramadol, a weak opioid, is often prescribed to treat pain in OA. There is a warning associated with tramadol and its concomitant use with all serotonergic antidepressants due to the concern for a DDI resulting in serotonin syndrome (SS).[2,3] Tramadol is a class II psychotropic drug that must be prescribed exclusively, therefore its DDI is less likely to be identified by pharmacists if there is no mechanism for reviewing the appropriateness of all currently used medications. Buprenorphine transdermal patch and combination product of acetaminophen and oxycodone, also class II psychotropic drugs in China, are not prone to serotonin related DDIs so that they are alternatives to tramadol. Also, paroxetine, a potent cytochrome P450 2D6 inhibitor, could significantly inhibit the metabolism of tramadol to its active metabolite M1 and reduce the hypoalgesic effect of tramadol.[4] Oxycodone is not prone to inhibition of CYP2D6 alone, thus its combination product (acetaminophen/oxycodone) could be used concomitantly with paroxetine.[5]

Wang et al addressed the the relationship between depression and OA, and their work is very enlightening and beneficial for international community. Their call for interdisciplinary collaboration to improve patients' quality of life, along with our perspectives may bring a more detailed guide in personalized therapy of osteoarthritis comorbid with depression.

Disclosure

The authors report no conflicts of interest in this communication.

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