Strontium ranelate as a potential new treatment for osteoarthritis

NEWS

Pain Management

Strontium ranelate (SR) is a medication used to treat osteoporosis. According to recent research, this medication not only lessens the pain associated with knee osteoarthritis (OA), but may even slow down the progression of the disease.

Osteoarthritis is the most common disabling joint disease worldwide and the treatment often a combination of non-pharmacological and pharmacological modalities. Commonly prescribed OA medications include symptomatic drugs (non-steroidal anti-inflammatory drugs; NSAIDs, analgesics, locally administered corticosteroids, viscosupplementation) and new compounds that are potentially reduce or stop the disease progression, called "Disease Modifying Osteoarthritis Drugs (DMOADs)".

Strontium ranelate (SR) increases bone formation while decreasing bone resorption and it potentially acts as a new DMOAD. The drug prevents the breakdown of bones caused by osteoclasts and also it increases the formation of new bone by bone-building cells called osteoblasts. A review by Han W, et al. was aimed to summarize the available information on clinical and pharmacological effects of SR in OA.

Researchers conducted a literature review using PubMed and European Medicines Agency (EMA) website for all publications and documents related to SR and OA. The literature review showed that 2g/day of SR was related with reduced radiographic knee OA progression, and significant clinical improvement. It was also significantly associated with decreased MRI-assessed cartilage volume loss (CVL) and bone marrow lesions (BMLs).

These findings demonstrated that SR might play an important role in the future for treating osteoarthritis. This drug was effective in reducing pain and improving physical function, suggesting that osteoporosis drugs may indeed hold a role in the treatment of OA. However, further research on the clinical efficacy and side effects will need to be conducted before the drug is approved for the use.

Source:	Expert opinion on investigational drugs
Link to the source:	http://www.tandfonline.com/doi/abs/10.1080/13543784.2017.1283403
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