Celecoxib Improves Back Pain Due to Vertebral Osteomyelitis

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Case Presentation

- A 53-year-old male with a PMHx of polio presented with acute onset low back pain and associated progressive bilateral lower extremity weakness of 6 months duration
- MRI demonstrated findings consistent with osteomyelitis at L1 (figure 1)
- He received IV antibiotics and a pain management regimen of acetaminophen, gabapentin, baclofen, oxycodone and topical lidocaine patch
- Upon admission to an inpatient rehabilitation facility, the patient complained of persistent low back pain
- Oxycodone, gabapentin, and baclofen were discontinued, and celecoxib was prescribed at 100mg twice per day
- The patient reported significant improvement in pain relief and demonstrated increased participation in physical and occupational therapies

Learning Points

- Celecoxib may represent an alternative or adjunctive option for pain relief in patients with vertebral osteomyelitis (VO)
- Failure to treat persistent back pain secondary to VO can result in disability and increased health care expenditures[4]

Figure 1. T1 hyperintensity enhancement of the anterior aspect of the inferior L1 vertebral body (short arrow) with abnormal soft tissue enhancement anterior and to the left of the L1 and L2 vertebral bodies (long arrow)

Discussion

- VO is an infection affecting the vertebrae and intervertebral discs[1]
- Typical treatment involves at least six weeks of antibiotic therapy, but back pain may persist for weeks to months[1]
- Conservative pain management strategies include modalities, physical therapy, and pharmacological options, most commonly gabapentin and/or opioids[1]
- Celecoxib is a selective COX-2 inhibitor which is commonly prescribed for osteoarthritis, but has also demonstrated efficacy in patients with inflammatory and bone-mediated pain[2,3]

References

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