E-Poster

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"Doctor, My Back Has Bent." Pisa Syndrome: A Case Report

Topic: Injections (Joint, Spine, etc.)

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BACKGROUND

Pisa Syndrome is a postural disorder characterized by a lateral trunk flexion of > 10º, which improves in the supine position. It predominantly affects patients with neurological disorders such as Parkinson's disease (PD) or those receiving antipsychotic treatment. We present a case of Pisa Syndrome secondary to early-stage PD and antipsychotic medication.

CASE DESCRIPTION

A 55-year-old female with a history of obsessive-compulsive disorder under treatment with aripiprazole, clonazepam, and sertraline was referred to Rehabilitation for dorsolumbar imbalance and pain. Brain SPECT-CT revealed signs of early presynaptic parkinsonism. Consequently, aripiprazole was discontinued, sertraline was reduced, and biperiden was initiated. The patient reported progressive rightward trunk deviation and lumbar pain over six months. Physical examination showed a reducible rightward spinal curvature, level pelvis, no radiculopathy, and a lower limb muscle strength of 5/5. She ambulated with a slightly widened base and bradykinetic gait.

Physical therapy focusing on spinal stabilization, stretching, and postural correction was initiated, along with an elastic back brace. Despite partial improvement, postural imbalance and pain persisted. An ultrasound-guided botulinum toxin (Xeomin) injection was administered to the quadratus lumborum (100U), iliocostalis (50U), and lateral rectus abdominis (50U). Two months post-injection, the patient achieved improved posture and independent ambulation, enhancing her autonomy and social well-being.

DISCUSSION

Pisa Syndrome affects 2-10% of PD patients, with higher prevalence in advanced disease stages and those with motor complications such as dystonia. Diagnosis is clinical, supported by imaging or neurophysiological studies to exclude other pathologies. Management is multidisciplinary, involving dopaminergic therapy optimization, withdrawal or adjustment of causative drugs, physical rehabilitation, and, in refractory cases, botulinum toxin injections. The toxin targets hyperactive paravertebral and abdominal muscles, reducing postural asymmetry.

CONCLUSION

Early diagnosis and individualized treatment of Pisa Syndrome are essential to improve functional outcomes. Rehabilitation restores partial postural symmetry, while botulinum toxin is a valuable option in refractory cases.

Statement of Disclosures

None

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