

Low Grade Glioma Masquerading As Knee Pain - A Case Report Emphasizing Upon The Importance of Comprehensive History Taking.

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ASRA
PAIN MEDICINE

23rd Annual Pain Medicine Meeting
November 21-23, 2024 | #ASRAfall24



Introduction

A comprehensive medical history remains crucial for making accurate diagnoses, especially in pain medicine. However, a lack of coordination between medical history and clinical examination can lead to misdiagnosis or delayed diagnosis. Herein, we present the case of a 44-year-old male where an intracranial pathology was overlooked for nearly 2 years due to a narrow focus on the patient's chronic left knee pain. This case was medically challenging as the emphasis on the patient's knee pain led clinicians to misdiagnose the issue as musculoskeletal, overlooking neurological causes.

Method

A written, informed consent was obtained for this case report. And as per the institutional policy, IRB approval was not required.

Case

A 44-year-old male presented to an emergency department (ED) with an initial complaint of left knee pain after a twisting injury. He reported intermittent episodes of cramping pain in his left sided extremities, often accompanied by paresis. These episodes were insidious in onset, lasting from a few seconds to minutes and resolving spontaneously. Motor deficits were noted in his left knee extensors, ankle plantar flexors, and dorsiflexors. Knee X-rays were unremarkable, and he was referred to orthopedics.

In the orthopedic clinic, he again reported pain in left knee with frequent falls. An X-ray of his spine revealed chronic, healed L1-L4 transverse process fractures; knee MRI and

electrodiagnostic studies were unremarkable. A knee brace and physical therapy did not improve his symptoms, so he repeatedly present to the ED with the same symptoms.

Later that year, he also reported increased tooth sensitivity, leading to multiple extractions. It was during his visit to the Physical Medicine and Rehabilitation department for evaluation of his recurrent falls, that attention was paid to his intermittent cramping pain episodes accompanied with weakness of the left leg. By then, he used a quad cane, a left-hinged knee brace, and a wheelchair for mobility. MRI brain was ordered to evaluate for central nervous system causes, which revealed a 3.6x3.1x2.3 cm IDH mutated low-grade glioma in the right superomedial parietal lobe. After neurosurgery intervention, chemotherapy, and radiotherapy, his pain and weakness in the extremities resolved, and he could walk without any assistance devices.

Discussion

This case underscores the critical importance of integrating a comprehensive medical history with thorough clinical examination and appropriate diagnostic testing. Despite symptoms suggesting a neurological issue, cognitive biases like anchoring and ascertainment led clinicians to focus narrowly on musculoskeletal causes related to the patient's chronic knee pain. Repeated non-contributory musculoskeletal findings reinforced this bias, delaying the consideration of a central nervous system cause. Furthermore, the patient's initial presentation of knee pain overshadowed other significant symptoms, causing clinicians to overlook a broader differential diagnosis. The diagnosis of a low-grade glioma was only made after a multidisciplinary review prompted further neurological investigation highlighting the need for a holistic approach in clinical practices and pain management. Clinicians must remain vigilant and consider alternative diagnoses, especially when initial treatments fail, to avoid similar oversights and improve patient outcomes.