

Differential Diagnosis for Neck Pain and Stiffness

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MISSION STATEMENT

“To our patients, we commit to provide the most effective, clinically superior physical therapy humanly possible.

The measure of our success will be found in the trust we build and in the hearts of those we heal.”

Background

Cervical spondylosis and neck pain are the second most frequent reasons for seeking a medical consultation. It is reported that over two-thirds of the population will experience neck pain in their life. Typical symptoms of neck pain can include stiffness, myelopathy, or radiculopathy. A life-threatening condition that can masquerade as neck pain and stiffness is an arteriovenous malformation (AVMs). AVMs are atypical connections between the arteries and veins of the circulatory system. This case highlights the importance of early recognition of red flags of an AVM and the importance of a referral to the appropriate medical practitioner.



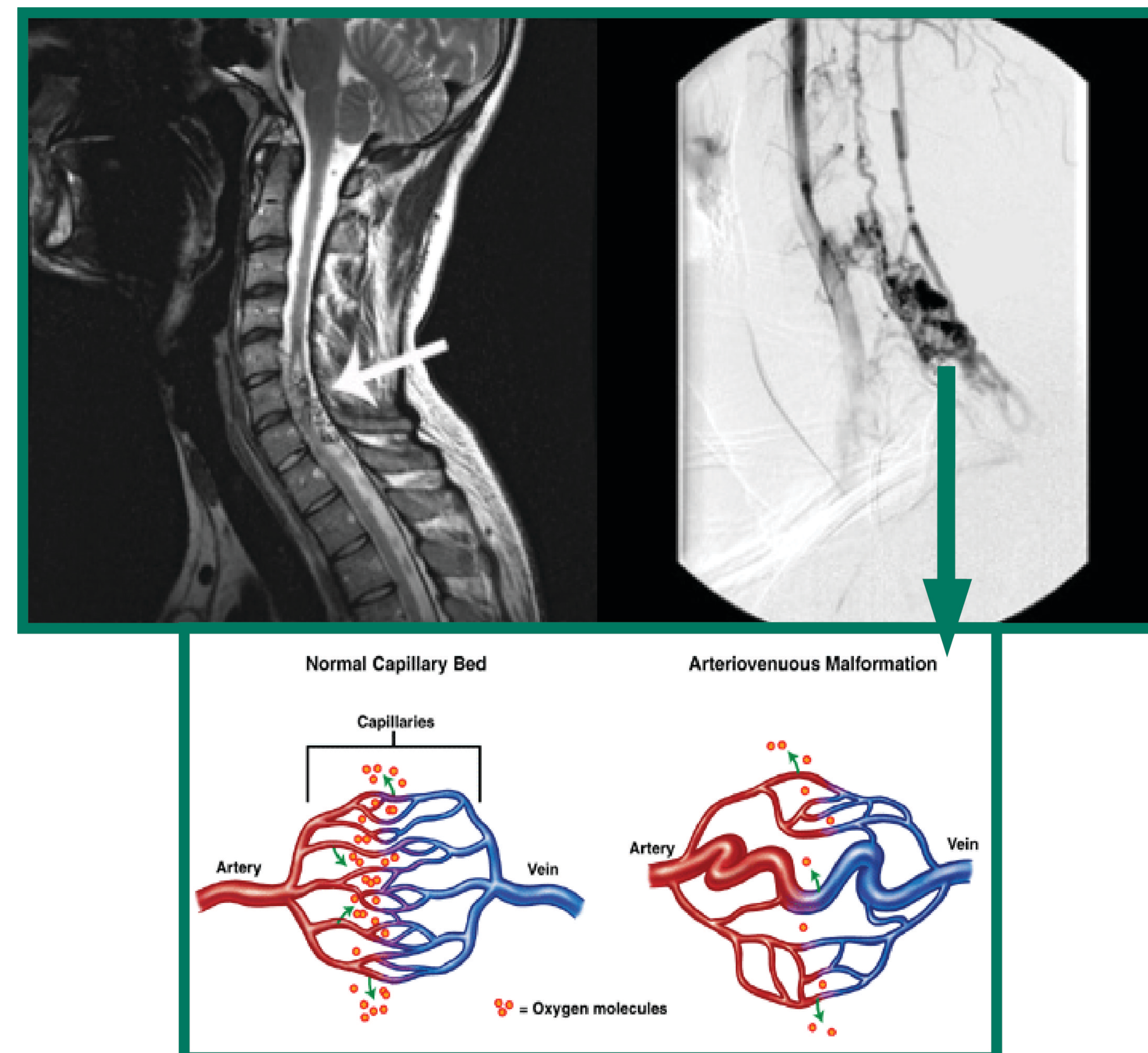
Examination/Evaluation

A 24-year old male presented with neck pain, notable weakness of the right upper extremity, and numbness and tingling into the right hand for approximately one month. Symptoms started after upper extremity heavy weight lifting. Initially, the patient was seen in the Emergency Room and received a plain film radiograph and a CT scan. Both were unremarkable. Two weeks later, the patient began experiencing occasional blurred vision, decreased concentration, loss of appetite, and was referred to Physical Therapy. The patient presented with constant, deep, aching neck pain of 8/10. He displayed poor, guarded posture and tenderness of the cervical spine. A functional screen of cervical and bilateral shoulder range of motion was completed as well as an upper extremity neurological screen. Results showed weakness of the right upper extremity, diminished reflexes, and decreased sensation consistent with C7-T1 nerve roots. No special tests were performed due to increased irritability. The initial clinical impression was possible cervical disc disease.

Outcome/Diagnosis

After six visits, the patient continued to have difficulty with sleeping, weakness of the right upper extremity, and no change in reported pain level. It was recommended by the Physical Therapist that the patient be referred to an orthopaedic surgeon.

A second CT scan and MRI were performed. It was confirmed that the patient had a high intensity ovoid mass extradurally to the right of the C7-T1 vertebrae. The patient was diagnosed with an AVM that was placing increased pressure on the C7-T1 nerve roots. Emergency cervicthoracic laminectomy to remove the AVM was performed preventing permanent weakness of the right hand.



Discussion/Conclusion

This case report discusses a patient where the following symptoms were present: unrelenting, constant pain, constant headache, decreased appetite, decreased concentration, and blurred vision. When more than one of these symptoms are present, there is the increased likelihood of a more serious pathology. This case report indicates the importance of identifying these symptoms as cervical red flags when evaluating and treating patients with neck pain and stiffness. Identifying them early-on in treatment will allow Physical Therapists to initiate the proper referral.

References

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