Polycythemia Vera Thrombosis Resulting in Cerebral Vascular Disease & Digit Amputations in a Young Female

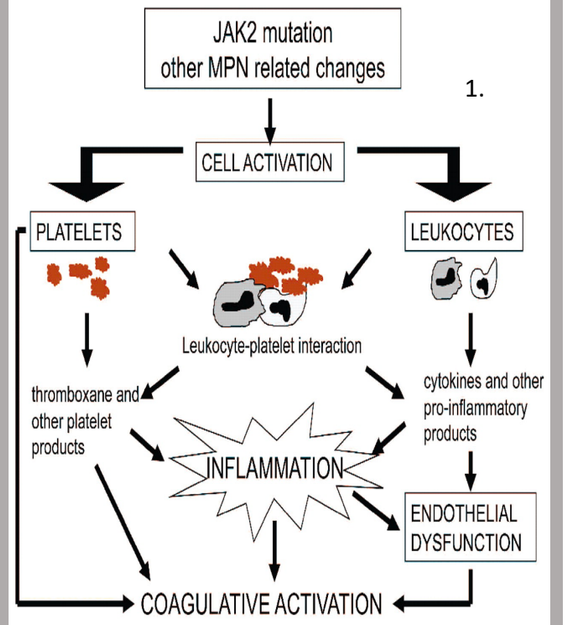
Safwan Zar, MD, Mery Elashvili, MD, DO

Burke Rehabilitation Hospital, White Plains, NY

CASE DESCRIPTION:

33-year-old active female athletic trainer with diagnosed Polycythemia Vera (PCV) on aspirin therapy, presented to acute care after presentation of painful paresthesia in bilateral upper extremity digits and left sided hemiplegia. Lab work was notable for erythrocytosis and thrombocytosis. MRI demonstrated acute infarcts involving bilateral frontal, parietal and occipital lobes and right cerebellar hemisphere. Carotid duplex portrayed right internal jugular vein thrombosis. After multiple courses of phlebotomy, patient was started on hydroxyurea. Patient was admitted to acute rehabilitation for further management of ongoing cognitive and left sided deficits. Due to progressing digit ischemia and pain, digit amputations were performed with return to rehabilitation. Hematology was consulted and transition to the JAK2 inhibitor, Ruxolitinib was initiated.

THROMBOSIS & SYMPTOM MECHANISMS



1.

Cytokine Cluster Symptoms

- Fatigue
- Muscle Ache
- Night Sweats
- Sweating

2.

Hyperviscosity Cluster Symptoms

- Headache
- Concentration deficits
- Dizziness
- Visual deficits
- Tinnitus
- Numbness/Tingling hands/feet

CONCLUSION

Polycythemia Vera can result in various thromboembolic phenomenon and even conversion into leukemia and or myelofibrosis. The complications of PCV presented unexpectedly in our patient leading to multiple thromboembolic sequalae and symptoms leading to functional decline. Therefore, it is vital for the physiatrist to understand the pathophysiology and consequences of the disease to reduce risk of recurrent complications and provide better quality of life management.

DISCUSSION

Polycythemia Vera can result in many severe complications represented by thromboembolic events. Patients may also present with symptoms that can decrease quality of life and function including numbness in the hands and feet, pruritis, bone pain, inactivity, insomnia and weight loss. Our case presents a unique sudden presentation of complications of PCV in a young active athletic trainer. The age and lack of comorbid conditions presented in our case with disease is uncommon with such sequalae. The arterial thrombosis in our patient instigated significant cognitive functional disability. The patients left hemiplegic deficits, pain and digit amputation required multidisciplinary rehabilitation to reestablish function and quality of life prior to safe discharge.

REFERENCES

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