AN UNEXPECTED CASE OF STEVENS-JOHNSON SYNDROME FROM MIDODRINE USE

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BACKGROUND

- Stevens-Johnson Syndrome (SJS) is a severe mucocutaneous reaction commonly triggered by medications resulting in necrosis and detachment of the epidermis.
- SJS is classified as less than 10% of the total body surface area affected, whereas toxic epidermal necrolysis (TEN) involves more than 30% of the body surface area.
- SJS/TEN is estimated to affect two to seven million people each year.
- Medications are causative in over 80% of cases.
- Commonly implicated drugs include anticonvulsants, sulfonamides, and antibiotics.
- Mean adjusted mortality reported for the Nationwide Inpatient Sample 2009-2012 (US) was 4.8% for SJS, 19.4% for SJS/TEN overlap, and 14.8% for TEN.

CASE DESCRIPTION

A 57-year-old female with a past medical history of hypertension, pulmonary embolism/deep vein thrombosis, anemia of chronic disease, gastric bypass surgery, chronic kidney disease, and rheumatoid arthritis presented with diffuse skin lesions that began after a recent hospitalization. She had been hospitalized for anasarca presumably due to worsening renal function, hyperammonemia, and hypoalbuminemia. During admission, her hospital course was complicated by septic shock secondary to Klebsiella and Serratia bacteremia where she completed a course of meropenem and vancomycin, which improved her condition. Although clinically stable, due to low blood pressure, she was discharged from the hospital on midodrine.

Two weeks post-discharge, she developed skin lesions on her legs that spread to her trunk, genitalia, and vermilion lips. Clinical findings and biopsy results confirmed SJS/TEN (BSA 20-25%). Her long-term medications included Lasix, rifaximin, lactulose, and aspirin. Midodrine was the only medication started recently. As SJS/TEN can develop within days to eight weeks after starting a new drug, we suspected the culprit to be midodrine. Midodrine was discontinued and she was admitted to the burn unit. She ultimately left AMA when clinically stable.

DISCUSSION

Stevens-Johnson Syndrome (SJS) is a severe mucocutaneous reaction that results in necrosis and detachment of the epidermis. Medications such as anticonvulsants, sulfonamides, and antibiotics are the causative agent in over 80% of cases. SJS can be classified as less than 10% of the total body surface area affected, whereas toxic epidermal necrolysis (TEN) involves more than 30% of the body surface area.

This is the first case report describing an association between SJS and midodrine. Because midodrine was the only new medication administered prior to the onset of SJS/TEN, we believe that it was likely the offending agent. Mortality rates of SJS/TEN are high at 19.4%. As such, withdrawal of the suspected agent is vital and has been linked to better outcomes. The earlier the causative agent is withdrawn, the better the prognosis. This should be a priority if patients present with blisters or erosions as in this case. Ultimately, medication lists should be thoroughly examined when SJS is suspected to not only identify the causative agent, but to prevent possible re-exposure.

CONCLUSION

This case report describes an association between SJS and midodrine. SJS/TEN is a rare potentially fatal condition that can be caused by different medications. Because midodrine was the only new medication administered prior to the onset of SJS/TEN, it was likely the offending agent. Withdrawal of the suspected agent is vital and has been linked to better outcomes.

REFERENCES