DRY GANGRENE TREATED WITH SILDENAFIL AND MEDICATION ERROR

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Background: Gangrene is defined as the ischaemic damage. Fever followed by marked coldness, cyanosis, pain and restricted mobility of extremity should always raise suspicion of gangrene. Intravenous nitroprusside, prostaglandins and hyperbaric oxygen have been tried with little success. Despite therapeutic interventions, mortality up to 40% and an amputation rate of 30–50%.

Purpose: There are few published reports on the use of sildenafil in dry gangrene. We describe the use of sildenafil in a patient of progressive systemic sclerosis.

Material and methods: A clinical case and literature review

Results: A 89-year-old institutionalized female with arterial hypertension and stroke history. She was on acenocumarol and enalapril therapy.
February/2014, the patient showed necrosis of 3rd and 4th finger of the left-hand which were amputated, and 5th finger of the right-hand. The blood culture grew negative.
November/2015, the patient came to hospital emergency with cyanosis, coldness and pain of 3rd finger of the right-hand, which was amputated.
The three days after discharge, she showed cyanosis and pain of 5th finger of the left-hand, and necrotic tissue with bleeding blisters on heels.
During hospital stay, sildenafil treatment started and the condition of the patient improved although without complete response.
24/February/2016, the patient had problems to buy sildenafil so her dermatologist changed to tadalafil.
09/March/2016 she showed worsening of lesions. Acenocumarol was changed to apixaban due to the lesions worsened when acenocumarol doses were higher (we found several reports on gangrene due to the use of acenocumarol) although anti-heparin antibody result was negative.
26/March/2016 she admitted in the Vascular Surgery-Service by pain and necrosis of 5th finger of the left-hand. Her doctor prescribed sildenafil and tadalafil because the nursing-home’s prescription contained tadalafil but the dermatologist’s prescription sildenafil.
This error didn’t affected to the patient because when the pharmacist transcribed the prescription, she called the dermatologist who stopped both drugs during hospital stay. Finally the patient kept 5th finger and continues with apixaban and sildenafil with remission of lesions.

Conclusion: The use of sildenafil in patients with gangrene is occasional and efficacy results come from isolated cases or series of cases. Sildenafil improves tissue perfusion and decreases erythema in affected area

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