Chronic regional pain syndrome (CRPS) can be difficult for a physician to diagnose as well as manage. Symptoms may persist for years after trauma and can last for months or even years. Diagnosis as well especially in CRPS II patients. Once a diagnosis has been established, treating this disorder may be even more difficult. A diagnosis does not always equate to a reduction of symptoms. We report the complete resolution of pain and vasomotor instability of a young, female patient with CRPS using oral Nifedipine (Procardia). The literature is sparse regarding the treatment of acute and chronic CRPS patients with oral Nifedipine. Ultimately, we do not advocate that Nifedipine should be used alone but rather as option in conjunction with physical therapy and functional rehabilitation. It appears that calcium channel blockers have a role in the management of chronic, cold CRPS (10). Nifedipine has been used successfully in other vasospastic conditions such as Raynaud's phenomenon which confirms the rationale for using in CRPS patients (11, 12). Oral calcium channel blockers have been used for vasospastic conditions, which controls the vasospasms by relaxing smooth muscle of the vessel lumen therefore increasing blood flow to the area. In the case report presented, we believe the patient responded well to treatment since the vasospastic component of her CRPS seemed to be the driving force behind her symptoms.

While much literature has been published on the management of CRPS, there has also been recent data published on prophylaxis. Adapted from recent literature, a daily dose of 500mg of Vitamin C daily has been shown to be effective in preventing CRPS in foot and ankle trauma/surgery patients (13).

As stated, the literature is sparse regarding the treatment of acute and chronic CRPS with oral Nifedipine. Ultimately, we do not advocate that Nifedipine should be used alone but rather as option in conjunction with physical therapy and functional rehabilitation. It appears that calcium channel blockers have a role in the management of chronic, cold CRPS (10). Nifedipine has been used successfully in other vasospastic conditions such as Raynaud's phenomenon which confirms the rationale for using in CRPS patients (11, 12). Oral calcium channel blockers have been used for vasospastic conditions, which controls the vasospasms by relaxing smooth muscle of the vessel lumen therefore increasing blood flow to the area. In the case report presented, we believe the patient responded well to treatment since the vasospastic component of her CRPS seemed to be the driving force behind her symptoms. In the chronic stage of CRPS, there was a cure rate of 65% in acute CRPS patients treated with oral Nifedipine, however, there were only five patients treated in this group. In the chronic stage of CRPS, there was a cure rate of 33% with 10:30 responding to treatment. One interesting note was that physical therapy was not implemented in the acute stage. The authors concluded that Nifedipine may not only improve pain but also vasomotor instability. CRPS II patients have complex regional pain syndrome of the lower extremity, which can cause severe disability and reduced quality of life. The evidence to support the use of oral Nifedipine is still limited and more studies are needed.

References