Severe and prolonged ergotism in a patient treated with ritonavir, indinavir and one tablet of ergotamine: a case report

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Objective: To present a case of HIV-infected patient treated with ritonavir and indinavir who developed ergotism after using one 1-mg tablet of ergotamine tartrate. Case Report: A 31 year old woman with HIV infection, who had been treated with Zilarvir® (AZT+3TC), ritonavir and indinavir for two months, developed bilateral progressive leg claudication 1 day after taking, a tablet of Cafergot® (ergotamine tartrate 1mg + caffeine 100mg) to relieve migraine headache. It was the first time she administered Cafergot® concurrently with the antiretroviral regimen. She complained of severe pain and paresthesia in her hands and feet. Physical examination revealed signs of tissue ischemia in her hands and feet together with decreased carotid, brachial, femoral and popliteal pulses and absent pulses over radial, tibialis posterior, dorsalis pedis arteries bilaterally. She was diagnosed with acute ergotism and hospitalized for treatment with intravenous nitroprusside, heparin, nifedipine and captopril. Her symptoms, especially pain, improved within 2 days. However, pain and ischemic signs recurred every time that intravenous nitroprusside was discontinued. As a result, intravenous nitroprusside therapy was required for 18 days without an adverse event. Moreover, she was treated with local wound care and intravenous antibiotics for blebs and ulcers on her feet. After 28 days, all medications prescribed for ergotism were discontinued. She completely resolved from the arterial insufficiency, with minimal scars of previous ulcers. The occurrence of her severe and prolonged ergotism was concluded to be secondary to interaction between ergotamine tartrate, a substrate for cytochrome P450 isoenzyme CYP3A4 and two strong CYP3A4 inhibitors; ritonavir and indinavir. Conclusion: Severe and prolonged ergotism can occur in patients who take combinations of minimal dose ergotamine and CYP3A4 inhibitors. Awareness of potential interactions between medications may decrease the risk of serious adverse events, such as ergotism. Reference: 1. Baldwin ZK, Ceraldi CC. Ergotism associated with HIV antiviral protease inhibitor therapy. J Vas Surg 2003;37:676-678. 2. Rey CP, Yebra M, Borrallo M, Vega A, et al. Irreversible Coma, Ergotamine and Ritonavir. CID 2003;37:72-73.3. Spiegel M, Schmidauer C, Kampfl A, et al. Cerebral ergotism under treatment with ergotamine and ritonavir. Neurology 2001;57:743-744. 5. Rosenthal E, Sala F, Chichmanian RM, et al. Ergotism related to Concurrent Administration of Ergotamine Tartrate and Indinavir. JAMA 1999;281:987. 6. Francisco JC, Viciana P, Cordero E, et al. Ergotism Related to Concurrent Administration of Ergotamine Tartrate and Ritonavir in an AIDS Patient. Antimicrobial Agent and Chemotherapy 1997;41:1207.