

Study targets treatment for serious ACE inhibitor side effect

April 28 2011

A new Henry Ford Hospital study takes a closer look at one of the lesser known, but potential most serious side-effects of ACE inhibitor use – facial, tongue and airway swelling – and identifies a successful and less invasive course of treatment.

Using a treatment protocol developed by Henry Ford, patients' symptoms were quickly diagnosed and promptly treated to reduce swelling, resulting in no tracheotomies to open the airway or reported deaths, says study author Samer Al-Khudari, M.D.

"This side-effect is rare, but when it happens, it can be anxiety-provoking for both patients and physicians," says Dr. Al-Khudari, a member of the Department of Otolaryngology-Head & Neck Surgery at Henry Ford.

"Our goal was to really take a closer look at the treatment options available and develop a better standard of care for not just otolaryngologist, but all health care providers to follow."

The study will presented April 30 at 114th Annual Meeting of the Triological Society, part of the Combined Otolaryngology Spring Meetings in Chicago.

ACE inhibitors are a popular class of drugs most often prescribed to treat high blood pressure, congestive heart failure and kidney disease, as well as prevent stroke.

While they are well-tolerated by most patients, there are some side effects including angiodema, swelling that occurs in areas of the head and neck (floor of mouth, tongue, lips, throat) and can lead to airway obstruction.

Patients most commonly come into the emergency department experiencing difficulty swallowing, shortness of breath and voice changes.

[ACE inhibitor](#) induced angiodema (AIIA) tends to be more common among African Americans.

The study included 40 patients who received care at Henry Ford Hospital over a one-year period. The majority of patients (92%) were African American, and most were taking an ACE inhibitor called Lisinopril.

Treatment for all patients at Henry Ford included IV corticosteroids and antihistamines. On average, medical therapy was initiated by otolaryngology services about one hour after the initial evaluation in the emergency department.

All patients underwent a physical examination and laryngoscopy, which uses a flexible viewing tube to evaluate the back of the throat, including the voice box. Floor of mouth swelling was present in 50% of patients, and massive tongue swelling was found in 11.6%.

About half of the patients were admitted to the intensive care unit, while six required intubation and 14 were monitored and discharged from the ER. None of the patients needed emergency tracheotomy or cricothyrotomy for airway control.

Throughout the course of treatment, inpatients were evaluated at least twice a day by the otolaryngology service, and repeat flexible

laryngoscopy was performed based on symptoms. Patients were discharged with or without a tapered steroid dose and scheduled for outpatient follow-up.

For most patients, AIIA was resolved in 27 hours.

"If a patient taking an ACE inhibitor notices intermittent swelling in the mouth, lips, face, the medication may very well be the culprit. When this type of [swelling](#) occurs, we recommend that patients contact their health care providers immediately and not wait for symptoms to worsen," says Dr. Khudari.

Regardless, Dr. Khudari says it's very important for [patients](#) to note that the benefits of ACE inhibitors greatly outweigh the potential risks.

Provided by Henry Ford Health System

Citation: Study targets treatment for serious ACE inhibitor side effect (2011, April 28) retrieved 19 July 2024 from <https://medicalxpress.com/news/2011-04-treatment-ace-inhibitor-side-effect.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--