CASE REPORT

Traumatic Dissection of Carotid Artery in a 34-Year-Old Patient Presenting to Emergency Department; a Case Report

Fatemeh Mohammadi¹, Reza Mosaddegh¹, Motahhareh Afrakhteh², Samira Vaziri^{1*}

1. Emergency Medicine Management Research Center, Iran University of Medical Sciences, Tehran, Iran. 2. Neurology Department, Firouzgar Hospital, Iran University of Medical Sciences, Tehran, Iran.

*Corresponding author: Samira Vaziri; Emegrency Medicine Department, Firouzgar Hospital, Iran University of Medical Sciences, Tehran, Iran. Tel: +989123456849; Email: samira.vaziri@yahoo.com

Abstract

Dissection of neck arteries including carotid artery is among the vascular injuries following blunt neck trauma. Manifestations of this injury are usually delayed and present as neurological problems. This injury is accountable for about 2% of cerebral infarctions but causes 20% of brain strokes in patients less than 45 years old. Aiming to discuss and emphasize the importance of this injury, in this article a case of carotid dissection presenting to emergency department (ED) is presented. The patient was a 34 year-old woman that visited ED following left hemiparesis, dysartery and headache that had initiated a few hours back. She had a history of hospital admission 10 days before due to car accident and rollover, and had been discharged with good general health following required examinations. In brain computed tomography (CT) scan, there was evidence of sub-acute ischemic infarction around the middle cerebral artery. Considering the age of the patient, evidence of wide ischemia and history of recent trauma, neck artery dissection was suspected and angiography was performed, which confirmed the diagnosis of carotid artery dissection.

Key words: Carotid artery, internal, dissection; carotid artery injuries; wounds, nonpenetrating; emergency department; stroke