

## Risks Associated With Use of Carotid Vascular Restraints



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## Law Enforcement use of Neck Restraint/Hold: (Sleeper Hold, LVNR, Carotid Restraint)



Majority of Law Enforcement Agencies in U.S. Have Banned or Reserve Use of "Chokeholds" and "Vascular Restraints" for Deadly Force Encounters

FROM 1976  
TO 1982  
**15 PEOPLE  
DIED AFTER LAPD  
CHOKEHOLDS**



**1992: LOS ANGELES BANS CHOKEHOLDS**

**BOSTON, DALLAS, AND OTHER CITIES BAN POLICE CHOKE HOLDS**

**CHOKE HOLDS ARE ALLOWED IN WASHINGTON, D.C. IF AN OFFICER IS IN IMMINENT DANGER**

## In-Custody Death: Positional Asphyxia/Carotid Restraint

<http://www.inthesetimes.com>



Video stills of police killing Eric Garner on July 17, 2014. (APR/Getty Images)

Features • January 12, 2015

### Why Eric Garner Couldn't Breathe

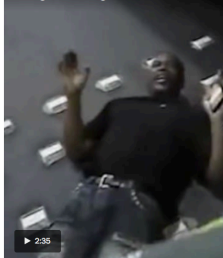
The chokehold is only half the story of homicidal violence.

By Terry J. Allen

## Las Vegas police officer charged with involuntary manslaughter in chokehold death of unarmed man

By Derek Hawkins June 7, 2017

Las Vegas officer charged after man's chokehold death



Las Vegas police officer Kenneth Lopez was charged June 5 in the death of unarmed man Tashii Brown last month. (Jordan Fergerson/The Washington Post)

**9.1.5 USE OF PHYSICAL FORCE**

When an officer is confronted with a situation that may necessitate the use of physical force, he/she should call for additional officers, when practicable.

Should physical force be used in order to gain control of a situation, an officer shall use only that force which is reasonable to gain control of the subject (NOBLE). Once a person is restrained or under control, the use of force is restricted to that which is reasonable to maintain control. Good judgment is extremely important in deciding which tactics to use and how much force to apply. Choking techniques, even if applied appropriately, cause a risk of death or serious physical injury, because they may restrict the flow of blood or oxygen to a person's brain.

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**Louisville Metro Police Department**

Standard Operating Procedures	SOP Number: 9.1
	Effective Date: 04/08/03 Prv. Rev. Date: 02/25/16 Revised Date: 04/10/16
	Accreditation Standards: CALEA: 1.3.1-1.3.7, 1.3.10, 26.1.1
	KACP: 1.3, 1.8, 1.11
Chapter: Use of Force	
Subject: Use of Force	

**9.1.5 USE OF PHYSICAL FORCE (CONTINUED)**

Choking techniques are not an approved force option and are prohibited, except in a situation where the use of deadly force would be allowed.

## LMPD SOP 9.1.5

- “Choking techniques, even if applied appropriately, cause a risk of death or serious physical injury, because they may restrict the flow of blood or oxygen to the person's brain. Choking techniques are not an approved force option and are prohibited, except in a situation where the use of deadly force would be allowed”

## Syracuse, NY Police Department Use of Force Policy

- 3.19A CHOKEHOLD:** “ ‘Chokeholds’ shall be defined as any techniques that use mechanical or physical force to restrain, incapacitate or disable a person by applying force or pressure to an individual's neck which creates a substantial risk of restricting breathing (airflow) or circulation of blood to and from the brain.”
- B. Officers shall not use chokeholds unless it is reasonable to believe there is an imminent threat of serious physical harm or death to an officer or a third person.”**

## Major Police Agencies Which Ban/Limit Vascular Neck Restraints and Consider its use Lethal/Deadly Force

Atlanta	Yes/+
Baltimore	Yes/+
Columbus	Yes/+
Washington, D.C.	Yes/+
Dallas	Yes/+
Detroit	Yes/+
Louisville	Yes/+
New York	Yes/+
San Francisco	Yes/+
Seattle	Yes/+
Virginia Beach	Yes/+
Winnipeg	Yes/+

## Risks of Carotid Restraints:

- Dissection of carotid or vertebral arteries resulting in a stroke or death
- Embolic stroke from plaque rupture
- Asphyxia death
- Anoxic brain damage
- Fractures of laryngeal cartilage & trachea
- Carotid artery thrombosis
- Vocal cord paralysis
- Permanent swallowing problems

## Board votes to recommend limited used of San Diego police restraint maneuver

BY: Jeff Laszky  
POSTED: 11:29 PM, May 22, 2018  
UPDATED: 7:46 AM, May 23, 2018



A board member proposed recommending a carotid restraint ban, but that got voted down seven to five.

A few members said that they did not want to prevent officers from being able to defend themselves. So, the board recommended banning the restraint and only allowing it when officers are being assaulted or their lives are threatened.

**CASE IN POINT**

### Vertebral Artery Dissection in Active-Duty Soldier Due to Mixed Martial Arts Choke Hold

Tyler Powell, MD; Timothy Fullam, MD; Jonathan Hammett, MD; Darrell Nettlow, MD; and Jason Harris, MD

In the military health system, it is important to be aware of this potential complication of combatives as instruction in close-quarters combat continues to be an important aspect of military training.



Powell T et al, Fed Pract, July 2018

### Acute aphasia and hemiplegia during karate training

Stephen Meairs, Lutz Timpe, Jens Beyer, Michael Hennerici

### Judo as a possible cause of anoxic brain damage


A case report

R. GLYNN OWENS, B.Tech., Dip.Psych., D.Phil., A.F.B.Ps.S.\*,  
E. J. GHADIALI, B.Sc., M.Psychol., Ph.D., A.F.B.Ps.S.\*\*

### Vertebral-Artery Dissection Following a Judo Session: A Case Report

By A. Lannuzel<sup>1</sup>, T. Moulin<sup>1</sup>, D. Amsellem<sup>2</sup>, J. Galmiche<sup>1</sup> and L. Rumbach<sup>1</sup>  
<sup>1</sup>Service de Neurologie et <sup>2</sup>Service de Pédiatrie, CHU Jean Minjoz, Besançon, France

### Sean Entin and life after the 'choke'



Former MMA manager Sean Entin, center, posed with Dan Henderson and physical therapist Shawn Fennegan after recovering from a stroke. Courtesy of Sean Entin

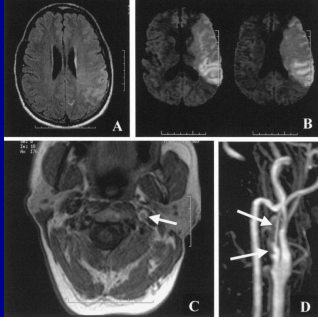
"I was in my jiu-jitsu class last October," Entin texted. "Nine months ago, and I got choked out. Three weeks later, I had a stroke."

"My carotid artery blew."

That, and a blood clot had formed around the injury -- which is what caused the stroke. Fearing it could "burst any second," Zauner performed a 4 1/2-hour surgery to repair the artery, inserted a stent, and removed a two-inch blood clot.

### Traumatic internal carotid artery dissection associated with taekwondo

Luis F. Pary, MD; and Robert L. Rodnitzky, MD



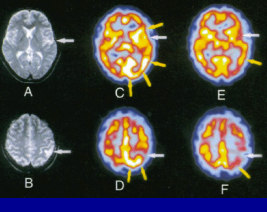
NEUROLOGY 60, April 18 of 2000

*Br J Sports Med* 1997;31:346-347

### Stroke without dissection from a neck holding manoeuvre in martial arts

M O McCarron, J Patterson, R Duncan


**Abstract**  
Carotid artery trauma is a known cause of stroke in young people. The vessel may occlude, dissect or shower thrombotic emboli into intracranial vessels. This paper reports the use of single photon emission computed tomography (SPECT) imaging in a 29 year old man who developed an embolic stroke after neck holding manoeuvres at a martial arts class. Awareness of the potential consequences of these procedures is matched by the need for rapid and accurate diagnosis of stroke now that thrombolytic and neuroprotective treatments are emerging, which are effective only within a short time window.  
(*Br J Sports Med* 1997;31:346-347)



### Internal Carotid Artery Dissection in Brazilian Jiu-Jitsu

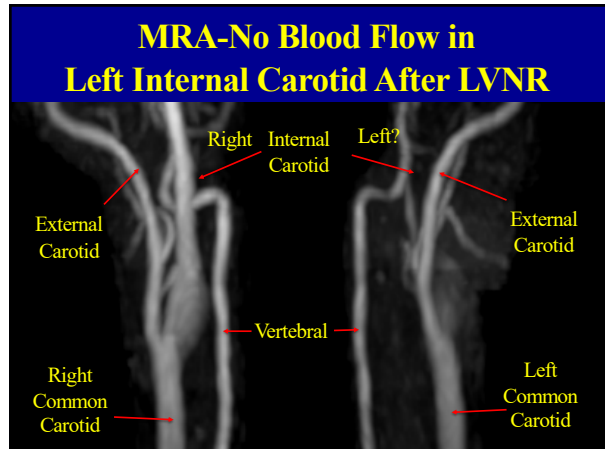
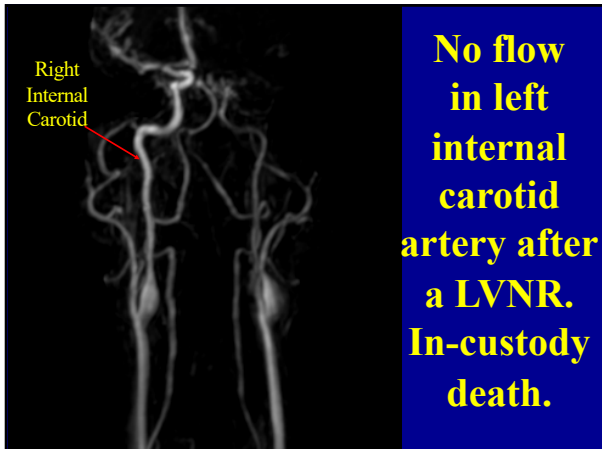
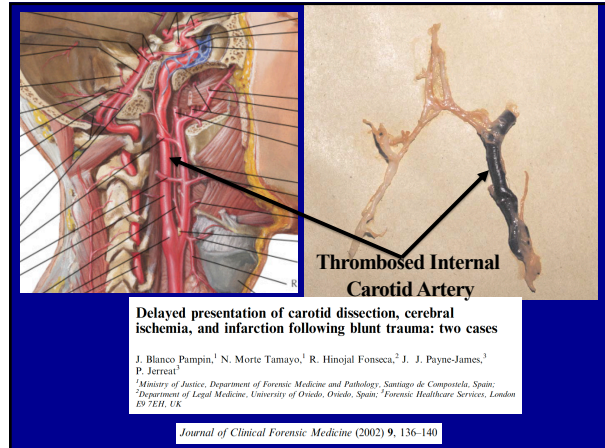
Zeferino Demartini Jr, Maxweyd Rodrigues Freire, Roberto Oliver Lages, Alexandre Novicki Francisco, Felipe Nanni, Luana A. Maranhã Gatto, Gelson Luis Koppe  
Department of Neurosurgery, Pontifical Catholic University of Paraná - PUCPR - Curitiba (PR), Brazil

*Journal of Cerebrovascular and Endovascular Neurosurgery*  
pISSN 2234-8565, eISSN 2287-3139, <http://dx.doi.org/10.7461/jcen.2017.19.2.111>





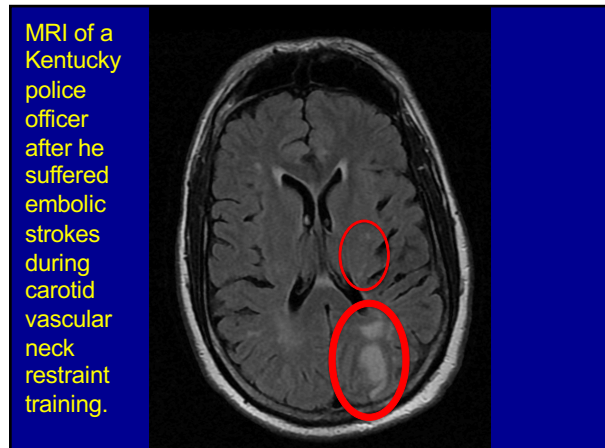
### Thrombosed Internal Carotid Artery 12 hours After the Application of a Carotid Restraint



### LEOs Suffer Acute Strokes During LVNR Training

- Kentucky police officer developed acute stroke symptoms during lateral vascular neck restraint training (tapped out while still conscious)\*
- Florida Police Academy instructor developed stroke symptoms after lateral vascular neck restraint training (Reay)

\*Law enforcement officer evaluated by Dr. Bill Smock, 2015





## Fort Wayne Police Department Fort Wayne, Indiana 1/19

### 2 officers injured in training

#### Police stop using restraint

JAMIE DUFFY | The Journal Gazette

Two Fort Wayne police officers were seriously injured during a training session on the lateral vascular neck restraint, a doctor who evaluated the men said Thursday.

Dr. Bill Smock, police surgeon at the Louisville Metro Police Department in Kentucky, said he traveled to Fort Wayne to examine the officers Tuesday after he was contacted by the Allen County prosecutor's office.

Smock said both officers suffered serious injuries and that one officer's family is calling his injuries a stroke. The officers were injured Monday, Smock said.

Fort Wayne Police Chief Steve Reed will discuss the situation during a news conference today. The police department announced Wednesday it had temporarily stopped using the lateral vascular neck restraint, or LVNR, because of potential safety concerns, but did not mention the two officers in a statement.

Smock led a training seminar on different types of restraint and the lasting effects of strangulation, including stroke, in Fort Wayne in September.

LVNR is a technique in which pressure is put on the carotid artery to cut off blood to the brain in an effort to render a person unconscious, Smock said.

A close relative of Capt. Tom Bendor, 58, one of the injured officers, said Bendor is still in the hospital. "He gets dizzy and nauseated, even if he opens his eyes," said the relative, who asked not to be identified. "It's like vertigo. We can't get up and do anything."

LVNR is not a choke hold that implies obstruction of the airway, Fort Wayne police Sgt. Jim Seay said Wednesday when police announced they were suspending the technique.

However, Smock, who is also on staff at the Training Institute on Strangulation Prevention in San Diego and chairman of the institute's medical subcommittee, said the LVNR has been banned in many cities, except for lethal or deadly force encounters.

On the institute's website, there are recommendations for law enforcement, including when to use carotid vascular neck restraints and that during training, no pressure should be applied to an officer's neck. "Because you run the risk of rupturing the carotid artery or breaking off pre-existing plaque that has built up in the neck that can cause a stroke," Smock said.

Smock also recommended that if officers use a vascular neck restraint, suspects on whom the technique is used should be cleared at a hospital with a CT scan with an angiography prior to being booked at jail.

Smock said he has investigated strokes and deaths associated with LVNR use, including a police officer in Louisville who sustained a massive stroke during LVNR training in 2016. He died in 2017 of a heart attack, Smock said, and was off work seven months because of the stroke. The police department banned the training and use of the LVNR except in lethal force encounters, Smock said.

During training, "they don't put any pressure on the officer's neck during training, but do show positioning," Smock said.

Ron Glatkowski, spokesman for the Indiana State Police, said "we do show the maneuver in our recruit class," but declined further comment.

Contacted Thursday, the prosecutor's office referred all questions to the Fort Wayne Police Department.

## News Story: Fort Wayne, Indiana Police Department



## Capt. Tom Bendor Lt. Tim Bogenschutz\*

- Lt. Bogenschutz suffered acute right arm paralysis from an embolic stroke during LVNR training
- Capt. Bendor suffered an embolic posterior circulation stroke the day after training

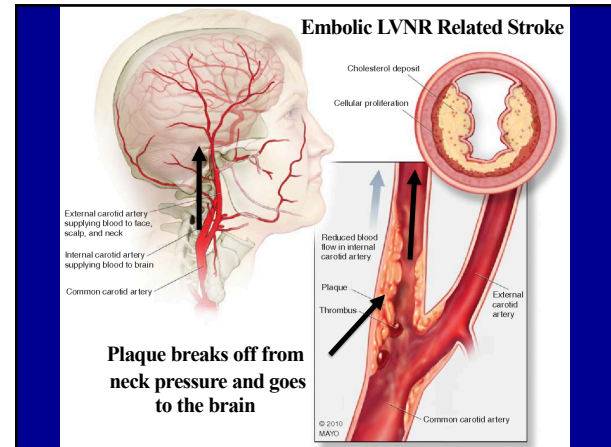
### FYPD chief confirms officers hospitalized after training

By: WANE Staff Reports

Posted: Jan 16, 2019 05:24 PM EST

Updated: Jan 19, 2019 07:40 AM EST

\*Information released by FYPD Physician Matthew Sutter, MD



## Jiu-Jitsu Practitioner Dies 2 Days After Rear Naked Choke in Training



## Death from Law Enforcement Neck Holds

- To quote Drs. Reay and Eisele, "Use of neck holds (by police officers) must be viewed in the same way as firearms; the potential for a fatal outcome is present each time a neck hold is applied and each time a firearm is drawn from its holster. The neck hold differs in that its fatal consequence can be totally unpredictable."

The American Journal of Forensic Medicine And Pathology, 1982;3(2):253-258

## U.S. Supreme Court Justice Thurgood Marshall

- It is undisputed that chokeholds pose a high and unpredictable risk of serious injury or death. Chokeholds are intended to bring a subject under control by causing pain and rendering him unconscious. Depending on the position of the officer's arm and the force applied, the victim's voluntary or involuntary reaction, and his state of health, an officer may inadvertently crush the victim's larynx, trachea, or thyroid. The result may be death caused by either cardiac arrest or asphyxiation. An LAPD officer described the reaction of a person to being choked as "do[ing] the chicken," in reference apparently to the reactions of a chicken when its neck is wrung. The victim experiences extreme pain. His face turns blue as he is deprived of oxygen, he goes into spasmodic convulsions, his eyes roll back, his body wriggles, his feet kick up and down, and his arms move about wildly.
- City of Los Angeles v. Lyons, 461 U.S. 95, 116-18, 103 S. Ct. 1660, 75 L. Ed. 2d 675 (1983) (Marshall, J., dissenting) (footnote and citations omitted)

## Civil Damage Awards from Neck Restraint Cases:

- Edwards v. City of Miami-\$75 million
- Mallet v. City of Phoenix-\$45 million
- Baez v. Livoti-\$2.45 million
- Barnard v. Theobald-\$1.6 million
- Nava v. City of Dublin-\$470,000
- Hampton v. City of San Diego-\$450,000

## Las Vegas Police Change Use-of-Force Policy Following Death of Unarmed Black Man Who Was Put in Choke Hold



Breanna Edwards  
9/22/17 11:52am • Filed to: NEWS

11 12

The revised use-of-force policy, which went into effect earlier this month on Sept. 15, still allows the officers to use the department-taught technique, but its classification has been upgraded from "low-level use of force" to "intermediate" or "lethal" force, meaning that officers will now have to prove to their superiors that whoever the choke hold was used on intended to hurt the officers or others.

## San Diego police to adopt some policy changes regarding 'carotid restraint' hold, but won't ban its use

10/31/18

In May, the Community Review Board recommended the removal of the carotid restraint technique as an option for officers dealing with someone displaying "active resistance behavior." But the board recommended it be kept as a use-of-force option against suspects displaying "assaultive or life-threatening behavior."

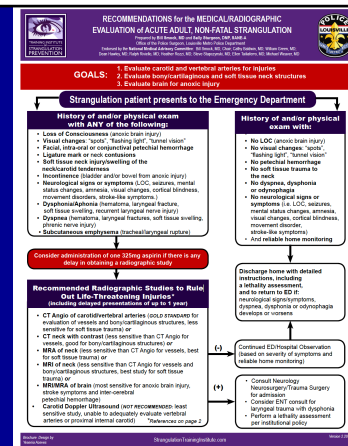


San Diego police Chief David Nisleit speaks Tuesday to the Community Review Board on Police Practices about changes to the department's use of the carotid restraint. (Alex Riggins/SDUT)

Nisleit did not accept the suggestions outright, and instead proposed a series of other recommendations — as outlined in a memo to the review board — which he said reflect "the need to take into consideration concerns expressed by the community, while continuing to provide officers from our Department with the tools to prevent the occurrence of deadly force situations whenever possible to safeguard lives."

## Recommendations for Law Enforcement Agencies:

- Use of carotid vascular neck restraints should be reserved for Lethal/Deadly force encounters only
- If an agency elects to train the technique, **NO** pressure should be applied to officer's neck during vascular neck restraint training to reduce risk of embolic stroke from arterial plaque rupture
- If utilized, the suspect must be medically cleared with a CTA of neck (CT scan with angiography) prior to being booked
- Officers with stroke symptoms should be immediately transported to a stroke center



### LE Agency Considerations:

- Serious injuries or death to suspect
- Serious injuries or death to officer during training
- Criminal liability if applied in less than deadly/lethal force encounter
- Civil liability associated with serious injury or death
- Civil rights violation-excessive use of force

### Questions?



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