

INTRADEPARTMENTAL CORRESPONDENCE

May 21, 1982  
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TO: Commanding Officer,  
Personnel and Training Bureau

FROM: Commanding Officer,  
Employee Opportunity and Development Division

SUBJECT: IDENTIFICATION OF ANY PHYSIOLOGICAL FACTORS AFFECTING  
DISPROPORTIONATE DEATH RATE AMONG BLACKS IN ADMINISTRATION  
OF UPPER BODY CONTROL HOLDS

This report was prepared in response to a directive from Personnel and Training Bureau to examine the possibility of a physiological relationship between the death of Blacks and the administration of upper body control holds.

OVERVIEW

This research covers the period from 1975, to the present. In that span of time eleven persons who were subdued by Los Angeles Police Officers, utilizing upper body control holds subsequently died. Eight of these persons were Black, three were White.

A brief description of the incident, the individual involved and the cause of death as determined by the coroner's office is as follows:

1. Radio Call - 415 Man (disturbing the peace)  
Suspect - Male, Black, 25 years, 6'5", 245 lbs.  
Hold Used - Bar Arm  
Cause of Death - A fractured cricoid cartilage and crushed thyroid cartilage with hemorrhage to surrounding tissue causing strangulation. The suspect was a heavy user of narcotics. However, there were no drugs in his system at the time of his death.
2. Radio Call - 415 Man (disturbing the peace)  
Suspect - Male, Black, 37 years, 6'1", 165 lbs.  
Hold Used - Bar Arm  
Cause of Death - Fractured cervical spine with a crushed spinal cord due to blunt trauma. The suspect was under the influence of PCP. ✕
3. Radio Call - 415 Man (disturbing the peace)  
Suspect - Male, Black, 28 years, 5'11", 180 lbs.  
Hold Used - Bar Arm  
Cause of Death - Overdose of nar on both arms. ✕
4. Radio Call - 647F Suspect (c  
Suspect - Male, Black, 41  
Hold Used - Carotid  
Cause of Death - Acute cardiores

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FOR INFORMATION  
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*April 7, 1982*  
WITNESS *Blumhauer*

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sequence of the upper body control hold. The left superior corner of the thyroid cartilage was fractured, and there were 2.4 milligrams percent of lidocaine (anesthetic) in the blood.

5. Radio Call - 415 Man (disturbing the peace)  
Suspect - Male, Black, 39 years, 5'5", 187 lbs.  
Hold Used - Carotid  
Cause of Death - Asphyxia due to neck compression during a restraining procedure.
6. Radio Call - Assault with deadly weapon suspect.  
Suspect - Male, White, 32 years, 5'8", 130 lbs.  
Hold Used - Carotid  
Cause of Death - Hypoxic encephalopathy (loss of oxygen to brain) due to respiratory arrest following struggle with the police while in a state of acute ethanol and cocaine intoxication.
7. Radio Call - 647F drugs suspect  
Suspect - Male, Black, 41 years, 5'11", 175 lbs.  
Hold Used - Carotid  
Cause of Death - Cardiac arrest and subsequent hypoxia (loss of oxygen).
8. Radio Call - 415 Man (disturbing the peace)  
Suspect - Male, White, 21 years, 6'0", 230 lbs.  
Hold Used - Carotid  
Cause of Death - Drug overdose. There was a slight hemorrhage to the right side of the larynx.
9. Radio Call - 148 P.C. suspect (interference with officers)  
Suspect - Male, White, 34 years, 6'0", 230 lbs.  
Hold Used - Carotid  
Cause of Death - Cardiac arrest.
10. Radio Call - 647 (g) suspect (proowler)  
Suspect - Male, Black, 36 years, 6'1", 190 lbs.  
Hold Used - Carotid  
Cause of Death - Fracture of thyroid cartilage caused by blunt force trauma to neck.
11. Radio Call - 415 Mental Case (disturbing the peace)  
Suspect - Male, Black, 19 years, 5'11", 160 lbs.  
Hold Used - Bar Arm  
Cause of Death - Asphyxiation due to/or as a consequence of neck restraint.

### INVESTIGATION

Medical experts were queried to determine the likelihood of a physiological explanation for the predominant Black death rate. An effort was made to interview physicians with a variance of specialties to insure that the data collected was comprehensive and complete. Information gleaned from those interviews is summarized as follows:

#### Doctor A. Dodge, Orthopedic Surgeon

Doctor Dodge stated that there are no physiological differences between Blacks, Whites, or any other ethnic group. He mentioned that Blacks have a higher rate of high blood pressure and heart disease. He could think of no medical reason why the death rate was higher for Blacks than Whites.

#### Doctor W. Mouradian, Orthopedic Surgeon

Doctor Mouradian stated that there are no anatomical or physiological differences between Blacks and Whites that would explain the higher Black death rate.

#### Doctor J. R. Kent, Internal Medicine-Endocrinology, Ph.D. (Physiology)

Doctor Kent stated that there are no anatomical or physiological differences between Blacks and Whites. Doctor Kent could offer no medical reason why the Black death rate is higher. Doctor Kent did have some concerns about upper body control holds applied to the neck. At the bifurcation of the carotid artery there exists a structure called the carotid sinus. If pressure is applied to this structure, the blood pressure drops and the heart could stop. This can cause instant death. As a diagnostic procedure for syncope (fainting) physicians press one of the carotid sinus structures and evaluate the effect on the electrocardiogram, and blood pressure. Doctor Kent stressed that only one carotid sinus is pressed and only for a maximum of 20 seconds. Doctor Kent stated that pressure on both the carotid sinus structures such as might occur if a choke hold was applied could cause the death of an otherwise healthy person.

#### Doctor J. H. Choi, Pathologist, Coroner's Office

Doctor Choi stated that there are no anatomical or physiological differences between Blacks and Whites that would explain the higher Black death rate. Doctor Choi observed that Blacks are more susceptible to sickle cell anemia, hypertension, and heart disease. It was Doctor Choi's opinion that any person Black or White who had these diseases or any disease affecting heart and lung capacity, would suffer greater harm and possible death from a loss of oxygen. Doctor Choi opined that the presence of heart, lung, or artery disease was a major factor in increasing chance of death, not race. Doctor Choi supervised the autopsies of several of the males who died subsequent to being subdued by upper body control holds. Doctor Choi observed that injuries to the necks

indicated that the altercations caused the neck holds to be transitory in nature. It appeared that although an officer might start with a carotid hold it could easily slip to a bar arm and back to a carotid. This phenomenon caused Doctor Choi to form the opinion that the danger of neck control holds is not increased dependant on type, but increased dependant on how long it is applied. Prolonged application of a neck control hold can cause death.

Doctor J. A. Brockenbrough, Cardiothoracic and Vascular Surgeon

Doctor Brockenbrough stated that there were no physiological or anatomical differences between Blacks and Whites. There is no physiological explanation for the disproportionate Black death rate. Doctor Brockenbrough indicated that officers would need to exercise care not to apply the carotid hold for extended periods, as loss of oxygen to the brain for longer than two minutes causes permanent damage. Doctor Brockenbrough further stated that pressure to the carotid arteries could press on the carotid sinus structures on both sides of the neck, causing a lowering of blood pressure and cardiac arrest.

Doctor A. W. Hibler, Otorhinolaryngologist (Ear, Nose, Throat)

Doctor Hibler stated that there are no physiological or anatomical differences between Blacks and Whites. Blacks do have a higher incidence of high blood pressure and heart disease. These diseases although more prevalent in Blacks are major health problems for Whites as well. Doctor Hibler opined that neck control holds are dangerous to all people healthy or otherwise because of the problem of loss of oxygen to the brain and pressure on the carotid sinus structures located at the bifurcation of the carotid arteries. Pressure on the carotid sinus causes a drop in blood pressure and cardiac arrest. Doctor Hibler also stated that sickle cell anemia a disease that inhibits the ability of red blood cells to retain oxygen only appears in five to ten percent of the total Black population.

Doctor L. Perry, Anesthesiologist

Doctor Perry stated that there are no physiological or anatomical differences between Blacks and Whites. Problems caused by neck control holds e.g. loss of oxygen to the brain, and pressure on the carotid sinus structures, are the same for all ethnic groups. Doctor Perry indicated that pressure on the carotid sinus structures located at the bifurcation of the carotid artery could cause a dangerous drop in blood pressure and cardiac arrest.

CONCLUSION AND RECOMMENDATION

The consensus of medical opinion is that there are no physiological or anatomical differences between Blacks and Whites, that would explain the disproportionate number of Blacks who have died subsequent to the application of upper body control holds.

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High blood pressure, and heart disease, are health problems that could cause increased danger to an individual if he or she was subdued utilizing a choke hold. These diseases although more prevalent in Blacks, also are a significant health problem for the general white population.

Sickle Cell Anemia, is a disease that inhibits the red blood cell's ability to retain oxygen. This disease can affect all races but most often appears in Blacks. A person who has this form of anemia would have a more adverse reaction to hypoxia (lack of oxygen) than a person who did not. However, no correlation can be drawn between sickle cell anemia, and the higher Black death rates as sickle cell anemia appears in only 5% to 10% of the total Black population. Also, of the eight Black males who died subsequent to being subdued utilizing upper body control holds, none had sickle cell anemia.

The hypothesis that there are physiological factors that might explain the higher death rate among Blacks than Whites subdued with upper body control holds has no basis in scientific fact. Because there is virtually universal agreement from the medical community on this issue it is apparent that nothing is to be gained from further inquiry.

It is recommended that this report conclude research into the question posed.



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