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January 26, 2011

Martin Li
Arias & Lockwood
225 W. Hospitality Lane, Suite 314
San Bernardino, CA 92408

RE : Terry Nash v City of San Bernardino, et al.

Dear Mr. Li:

As per your request, I have reviewed the following materials from the above referenced case:

Police Report Case Number 09-07219
Report from Assistant District Attorney Dennis dated December 16, 2009
EMS run sheet from San Bernardino Fire Department
EMS run sheet from AMR
Emergency Department Record from St. Bernardine Medical Center
Medical Examiner Autopsy report and toxicology report
Autopsy photos
EMS Dispatch records
Police Dispatch records
Photographs taken by SBPD
CD of 911 dispatch
DVD interview of Officer Shaun Sandoval
DVD interview of witness David Fuga
DVD interview of Officer Brett Murphy
DVD interview of Officer Clint Walton
DVD interview of Officer Ronel Newton
DVD interview of Officer Lanier Rogers
DVD interview of Officer Erick Martin
DVD interview of Officer Robert Bellamy
DVD interview of Sergeant Dan Gomez
Decedent's academic records from Los Osos High School
Decedent's academic records from Rancho Cucamonga High School

Deposition of Scott Walton
Deposition of Angel Nichols
Deposition of Shirley Allen
Deposition of Glen Holt, M.D.
Deposition of David Jasper
Deposition of Ken Koster
Deposition of Shuan Sandoval
Deposition of Daniel Gomez
Deposition of Erick Martin
Deposition of Ronel Newton
Declaration of Roger A. Clark
Declaration of Ronald L. O'Halloran, M.D.

After reviewing the materials, there are several issues that are clear given this available information. Terry Wayne Jackson (aka Terry Nash) was acting in a bizarre manner on March 1, 2009 in a park and police were called to investigate. He was found to be sweating profusely acting in a paranoid state and was thought to be under the influence of drugs. When officers arrived, Mr. Jackson climbed into a lake. When he came out, he got into an altercation with the officers. He had a TASER Electronic Control Device (ECD) used on him with little effect. Then a Lateral Vascular Neck Restraint (LVNR) was attempted, but released. Then he was handcuffed in the front, leg irons were placed and a loose hobble restraint was placed. He continued to struggle on the ground and some officers pressed down with some body weight to keep him from moving. He later became passive and then was noted to be in full cardiac arrest. He was treated by paramedics and transported to the hospital, but ultimately died. Given this history, there are a number of issues that need to be addressed in more detail. All opinions given are to a reasonable, or higher, degree of medical or scientific certainty or probability based on the information currently available.

In brief, my opinions are as follows with more description of each below:

1. Mr. Jackson did not suffer from positional asphyxia nor did the restraint have any contributing component to his demise.

2. The weight force on the back did not cause or contribute to Mr. Jackson's death.

3. The use of the LVNR did not contribute to the death of Mr. Jackson.

4. The use of the TASER ECD did not contribute to the death of Mr. Jackson.

5. The cause of death was cardiac arrest secondary to methamphetamine associated excited delirium. Untreated schizophrenia and cardiomegaly are also contributing factors.

Case review in detail

Though there are variations of the reporting of the events that occurred that day depending on the individual who is recalling, when the recall was captured, what their vantage point was and other factors. Based on the reports and depositions in their totality, this is what I have determined to be the most accurate history. Terry Wayne Jackson (aka Terry Nash) was acting in a bizarre manner on March 1, 2009 in a park and police were called to investigate. He was found to be sweating profusely acting in a paranoid state. He was delusional when noted to be repeatedly saying "the dragons, the dragons, the dragons…" When officers arrived, Mr. Jackson climbed into a lake. When he came out, he got into an altercation with the officers when they tried to help him. He had a TASER Electronic Control Device (ECD) used on him with little effect. The TASER ECD was fired at close range into his back but probe spread was not wide enough to cause complete neuromuscular incapacitation. Then a Lateral Vascular Neck Restraint (LVNR) was attempted by Officer Newton, but was released before Mr. Jackson lost consciousness.

Mr. Jackson was then cuffed in the front using two sets of handcuffs due to his size. Several distraction strikes were given by Officer Rogers to attempt to enable him to be cuffed. He continued to kick his legs, head butt and swing his arms. Leg irons were placed and a loose hobble restraint was then placed. Mr. Jackson was reported by officers and witnesses as trying to bite the officers several times as well. After being fully restrained, he fought being placed into the back of a police car. Given his size and the amount of struggling, the decision was made to transport him by ambulance.

He was maintained in a prone position on the ground. He continued to struggle on the ground and some officers pressed down with some body weight to keep him from moving. Officer Walton reported placing a knee onto the subject's left lower hip. Officer Martin reported using both hands and 20-30% of his right knee weight on Mr. Jackson's left mid back. Officer Murphy reported using approximately 50% of his body weight by leaning with his left shin to hold Mr. Jackson's right forearm pinned to the ground. Officer Sandoval placed his knee in Mr. Jackson's upper back and removed it when he noted that level of resistance had declined. As Mr. Jackson began to struggle less, the officers reported only using hands to maintain control of his position.

He later became passive but was noted to still be breathing and pulses were present. Officers later noted he loss of pulses and cessation of breathing at approximately the time the ambulance arrived at scene. And when the medical aid arrived and evaluated Mr. Jackson, he was confirmed to be in full cardiac arrest and resuscitation was initiated. He was found to be in an asystolic (flat line) rhythm when initially evaluated and treated by paramedics. He was aggressively treated and transported to the hospital, but was unable to be resuscitated and ultimately died.

Use of the passive restraint: There are no studies, clinical findings in this case or previous case reports that support that any variation of restraining a handcuffed individual with hands in front, shackling his legs and hobbling will impede one's ability to ventilate and cause positional asphyxia.

Leaving a subject on his stomach in the prone position is considered physiologically neutral. The patient was breathing and was moving side to side, lifting up and was not having the ventilatory movement of his lungs impeded. This patient did not suffer from positional asphyxia nor did the restraint have any contributing component to Mr. Jackson's demise.

Additionally, besides the restraint not causing positional asphyxia or other significant ventilator impact, the restraints actually limits the physical activity of the subject, decreasing muscle contractions of the large muscle groups in the arms and legs and thus, the ability of the body to consume oxygen. The hobble restraint limits the overall oxygen consumption of the subject, which, in a state of extreme excitation, can be considered essentially protective by reducing additional production of lactic acid from continued muscle contractions and oxygen consumption. This limitation of lactic acid is important in subjects who already have an extreme metabolic acidosis from extreme agitation and drug use, like Mr. Jackson.

Weight force on the back during restraint: During the period that Mr. Jackson was being handcuffed, he was restrained in a prone position with a certain amount of weight force was being placed on his back maintain him in a safe position and keep him from rolling into the lake or hurting himself. Mr. Jackson was making noises, breathing and struggling and without any evidence of respiratory or ventilatory difficulty during this time period. He was reported to be moving and resisting during this period and was not noted to complain of shortness of breath or difficulty breathing.

The amount of weight used was descried above. Officer Walton reported placing a knee onto the subject's left lower hip. Officer Martin reported using both hands and 20-30% of his right knee weight on Mr. Jackson's left mid back. Officer Murphy reported using approximately 50% of his body weight by leaning with his left shin to hold Mr. Jackson's right forearm pinned to the ground. Officer Sandoval placed his knee in Mr. Jackson's upper back and removed it when he noted that level of resistance had declined. As Mr. Jackson began to struggle less, the officers reported only using hands to maintain control of his position.

Given that Mr. Jackson was clearly alive and fighting during the period of restraint and weight force, and that the cardiac arrest was sudden, as well as there were no findings or changes consistent with asphyxiation on autopsy, the weight force on the back did not cause Mr. Jackson's death. The majority of the weight force was not even on Mr. Jackson in such a position that would have created the potential to limit ventilation. The weight on the hip and arm by Officers Walton and Murphy would have no impact on ventilation. The weight placed by Officer Martin on the left mid back would not significantly limit ventilations enough to cause asphyxiation. And even added to the knee placed to the upper back by Officer Sandoval would not cause asphyxiation. Research using up to 220 lbs. of weight on a subject's back has not shown to cause physiologic changes that would imply asphyxiation is even possible with that amount of weight.

Lateral Vascular Neck Restraint (LVNR)

The pathophysiology, and thus the safety, of the Lateral Vascular Neck Restraint (LVNR) is relatively straightforward and well delineated in many texts. The purpose is to place the arm around the neck of the subject to be controlled. The crook of the elbow is placed at the anterior (front) region of the neck and the forearm and upper arm come around the sides and are used to place pressure on the lateral aspects of the neck where the carotid arteries are located. Pressure placed on the arteries diminishes blood flow to the brain, quickly rendering the subject unconscious. The elbow being at the location of the anterior portion of the neck prevents pressure being placed on the airway itself. It is just a fulcrum, not a pressure point. Thus the term "choking out" of a person really is not accurate as there is no choking involved. That term was originally coined when in the past when a true chokehold was being utilized: where the forearm crossed the anterior neck in a "bar-like" hold and there was truly choking and airway obstruction involved. This does not occur in a properly placed LVNR. And when the restraint is immediately released after rendering the subject unconscious, the procedure is safe without significant short or long-term effects.

The history and autopsy do not reflect that an inappropriate placement of the neck hold occurred. Officer Newton attempted the hold with success starting so that he opted to release a little pressure from Mr. Jackson who immediately moved his neck and started resisting again. The hold was not re-attempted at that time. Mr. Jackson did not lose consciousness during the hold, and thus the hold really could not have been placed long enough to cause brain injury or other neurologic injuries. And Mr. Jackson was able to fight and struggle well after the LVNR was placed. Additionally, the findings in the autopsy report support that the hold was appropriately placed with an appropriate use of pressure, as the hyoid bone was intact as were the laryngeal cartilages. There was minor soft tissue injury to some of the neck muscles, but not out of the ordinary for the pressure hold to the neck. The use of the LVNR did not contribute to the death of Mr. Jackson.

TASER Electronic Control Devices (ECDs)

There is a great deal of unwarranted concern of electrocution based on lay misunderstanding of the reported 50,000 volts (V) peak open arcing voltage used by TASER handheld ECDs. TASER handheld ECDs deliver only a fraction of the 50,000 V to the body. In the case of the TASER X26 ECD, the mean delivered pulse voltage is 580 V.

However, it is not the voltage, but the sustained current or amperage, or delivered electrical charge, that actually creates a risk for electrical injury. For example, the static electricity from walking across a carpet can generate 30,000 to 100,000 V. However, the average and actual delivered electrical current of the TASER X26 ECD is only about 1.9 milliamperes (mA) (or, 0.0019 amperes (A)) and the peak current is only about 3 A. By way of comparison, a TASER M26™ ECD has a peak current of about 17 A while a Christmas tree light string will have on average current of 0.4 A or 400 mA, which is about 200 times the average (or actual) delivered current of the TASER X26 ECD.

The stored energy in the TASER X26 ECD is about 0.36 joules (J) per pulse (J/pulse), and the

delivered energy is about 0.1 J/pulse, with the comparison of an automatic external cardiac defibrillator (AED) used by many times per day by paramedics using 360 J, over 3000 times greater than the X26 ECD.

Or, if one thinks about it, this limited amount of delivered electrical energy able to be transferred to a person makes sense as the TASER X26 ECD is only powered by a battery of two 3 V cells (Duracell CR123s), commonly used in some small digital cameras, not an electrical outlet or power generator. It is the TASER ECDs rapid cycling that can cause the subjects' muscles to contract at about 19 times a second that can offer the effective incapacitation of the subject in probe mode, or painful compliance in drive-stun mode, while still offering a significant safety margin from electrical injury.

Once the energy from an ECD is turned off, the subject is back to his physical baseline. Mr. Jackson had the TASER ECD delivered in probe mode with the darts penetrating his back. The distance from which the device was fired was reported by Officer Bellamy to be 4-5 feet. The spread of the darts was approximately 10 cm (3.9 inches) as noted by the medical examiner. The spread is too narrow to offer effective neuromuscular incapacitation by the TASER ECD. This minimal response was what was reported by the officers stating that the TASER ECD did not affect him much and he did not fall to the ground. Mr. Jackson was reported by bystanders and the officers to have signs of being very much alive after the initial TASER ECD activations and was reported to still be struggling with officers for quite a while after the activation. The use of the TASER ECD did not even affect him clinically, let alone contribute to the death of Mr. Jackson.

Excited Delirium

So after reviewing what was non-contributory to the death of Mr. Jackson, it is also critical to identify why this young male suddenly died. During the time of his arrest, Mr. Jackson was exhibiting signs consistent with excited delirium. In his case, the excited delirium, also known as agitated delirium, was caused by his methamphetamine use as well as his untreated schizophrenia. Excited delirium is a syndrome most commonly caused by use of stimulant drugs like cocaine, methamphetamine or PCP and presents typically with aggressive and often paranoid behavior, but can also be caused by uncontrolled behavioral or psychiatric illnesses. Classically, people suffering from excited delirium are delusional, are hyperactive, sweating, hyperthermic (high body temperature), may take off their clothes and become under-clothed for their environment, may be violent, described as having superhuman strength and are often breathing fast.

Mr. Jackson was exhibiting classic signs of excited delirium. He was delirious, commenting on dragons. He was reported as sweating profusely, even before the altercation. He was described as having superhuman strength, lifting up officers when they were trying to hold him down. He was under-clothed, wearing only boxer shorts in the park. He was violent and not following police commands, including throwing punches at them. And finally, he was severely hyperthermic, with a core rectal temperature noted to be 104.3 ate 17:05 that day, over 30 minutes after he was pronounced dead.

Excited delirium places the individual at increased risk for sudden death syndrome, felt by most experts to be caused by an irregular heartbeat, caused by the increased stress and work on the heart by the excited, over-stimulated, agitated physical state. Once the heart goes into an irregular beat, blood flow through the body ceases and shortly thereafter, the subject will lose consciousness due to lack of blood flow to the brain and then stop breathing. Often, law enforcement officers will notice that the subject has finally quieted down, no longer yelling and struggling, thinking that he has finally calmed down and given up the fight. Then a short time later is when someone will identify that the subject is suddenly in cardiac arrest. In this case the change in status was promptly noted by the officers involved and appropriately addressed by the arriving paramedic personnel. His initial cardiac rhythm was asystole which is also consistent with sudden death due to excited delirium.

The other component to patients who go into cardiac arrest from excited delirium is that they are almost universally unable to be successfully resuscitated. In this case, based on the dispatch records, Mr. Jackson was trying to jump into the water at 13:19, and he was in custody at 13:20. The officers brought a car around and tried to load him, but were unable due to his agitated state. Less than 9 minutes after having him in custody, they requested an ambulance and the ambulance arrived less than seven minutes later. Even if the ambulance was called in advance and staged waiting for Mr. Jackson to be secured in custody, they would have only been there minutes earlier and this would not have made a difference in his outcome. His system had lost the ability to auto-regulate and this cascade was not going to be altered. Even patients presenting to a comprehensive emergency department in the state that Mr. Jackson was will typically succumb to the excited delirium despite a full experienced medical team's best efforts.

Cardiomegaly

Mr. Jackson had hypertrophy and dilation of heart noted on his autopsy. This physical enlargement of the heart in and of itself can place an individual at increased risk for sudden cardiac arrest and death. Given the excited state and agitation of Mr. Jackson, along with his enlarged heart, he was at risk to go into cardiac arrest whether or not police were involved.

Cause of Death

Therefore, I essentially agree with the Medical Examiner's report of the cause of death in this case. The background presentation and autopsy findings support that Mr. Jackson died from excited delirium syndrome due to his methamphetamine use. Though it is accurate that he was in the presence of law enforcement restraint, this was non-contributory to the death.

Qualifications

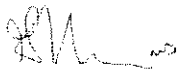
My background is that I am a full Professor with the University of California, San Diego School of

Medicine and a full time faculty member in the Department of Emergency Medicine at the University of California, San Diego Medical Center. I am residency trained and board certified in emergency medicine. I work full time as a practicing clinician in the Emergency Department of a busy urban hospital. I also have worked as the medical center as the Director of Custody Services for the San Diego County Sheriff's Department Jail Medical Service since 1999 where I oversee direct patient care, interface between the jail clinical staff and the hospital staff, and have been involved in the process of utilization review. I have also served as the UCSD Medical Center's Chair of the Medical Risk Management Committee as well as the Chair of the Patient Care and Peer Review Committee, both of which are charged with the task of reviewing medical records and making determinations of standard of care.

As a physician working at both the jail and in the emergency department that is contracted to care for incarcerated patients, I have evaluated thousands of patients over the last ten years who have been restrained, received a TASER device activation, and/or have had sudden cardiac arrests. I have performed and published extensive research on subjects who have been restrained and human research on the TASER device. This includes having restrained subjects hundreds of times utilizing police restraining techniques and being involved with over 200 TASER device activations. I have even been the recipient of multiple TASER activations personally. Given the frequency of use of this procedure by law enforcement and my own research interests, I regularly perform a complete review of the literature regarding restraint use, TASER devices and sudden death in custody.

Appendix A is list of all publications authored by me over the previous ten years. Appendix B is a list of all cases in which I have testified as an expert in trial or deposition within the preceding four years. I have not referred to any other specific sources beyond my own research. I have previously sent you my current Curriculum Vitae and rate sheet. The knowledge base that I utilize has been developed over time from my years of clinical practice, reading and research, including specifically those articles that I have published myself in Appendix A.

Respectfully submitted,



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