



**OFFICE OF THE DISTRICT MEDICAL EXAMINER
DISTRICT 15 – STATE OF FLORIDA
PALM BEACH COUNTY
3126 GUN CLUB ROAD
WEST PALM BEACH, FLORIDA 33406-3005
(561) 688-4575
(561) 688-4592 FAX**

NAME: MCCARVER, DALLAS

CASE NUMBER: 17-1423

DATE OF DEATH: August 22, 2017

AGE: 26

SEX: M

RACE: W

DATE OF AUTOPSY: August 23, 2017 / 1050 hours

AUTOPSY FINDINGS:

1. Severe cardiomegaly (833 gram heart) with concentric left ventricular hypertrophy
2. Coronary artery atherosclerosis (severe in left anterior descending; moderate in right coronary)
3. Heavy lungs (617 grams right; 619 grams left) without hyperinflation or mucus plugging
4. Hepatomegaly (4,593 gram liver)
5. Minimal nephrosclerosis, and hypertrophy of kidneys (456 gram right; 503 gram left)
6. Papillary thyroid carcinoma (non-contributory)

CAUSE OF DEATH: Severe Concentric Left Ventricular Hypertrophy with Coronary Artery Atherosclerosis

CONTRIBUTING CONDITIONS: Chronic Use of Exogenous Steroid and Non-Steroid Hormones

MANNER OF DEATH: Natural

OPINION: Mr. McCarver was a 26 year old body builder with a medical history including dyslipidemia (low HDL, elevated LDL), elevated aminotransferases, and a chronic cough with some episodes of associated shortness of breath. Mr. McCarver had a history of using non-prescription exogenous steroid and non-steroid hormones. He also had a reported family history of early-onset atherosclerosis and hypertension. He collapsed in March 2017 at a competition, during a period of ongoing respiratory symptoms. During a follow-up evaluation, an abnormal electrocardiograph met minimal voltage criteria for left ventricular hypertrophy.

NAME: MCCARVER, DALLAS

CASE NUMBER: 17-1423

Mr. McCarver was in his usual state of health on August 21, 2017, but was found unresponsive at home less than one hour after he was last seen alive. Paramedics responded and found him to be cyanotic and without vital signs. Advanced cardiac life support measures were initiated. He was transported to the hospital, and despite further efforts, death was pronounced shortly after 0100 hours on August 22, 2017.

At autopsy, Mr. McCarver had severe cardiomegaly and concentric left ventricular hypertrophy, moderate to severe coronary artery atherosclerosis, hepatomegaly, hypertrophy of the kidneys, and striae on thoracic skin. There were no features of congestive heart failure. He also had papillary thyroid carcinoma. Mr. McCarver's urine was tested for anabolic steroids, and was positive for trenbolone metabolite (an anabolic androgenic steroid listed in Schedule III of the Controlled Substances Act). His testosterone to epitestosterone ratio was elevated above normal (based on criteria recommended by the World Anti-Doping Agency).

Use of anabolic-androgenic steroids is associated with greater heart weights, greater cardiac mass, increased left ventricular wall thickness/left ventricular hypertrophy, cardiomyopathy, and hyperlipidemia with coronary artery atherosclerosis. In some studies, they are also associated with hypertension, changes in vascular integrity and function, and conduction abnormalities such as lethal arrhythmias.

Mr. McCarver's death occurred after an unwitnessed acute cardiac event, and is due to his predisposing factors of severe concentric left ventricular hypertrophy with coronary artery atherosclerosis in the setting of chronic use of exogenous steroid and non-steroid hormones. There is significant overlap in features related to naturally-occurring and/or familial cardiovascular disease and those resulting from chronic use of exogenous hormones, and these factors are best viewed as synergistic contributors to Mr. McCarver's premature death.

References:

1. Achar S, Rostamian A, Narayan SM. Cardiac and metabolic effects of anabolic-androgenic steroid abuse on lipids, blood pressure, left ventricular dimensions, and rhythm. *Am J Cardiol.* 2010 September 15;106(6):893-901.
2. Baggish AL, Weiner RB, Kanayama G, Hudson JI, Lu MT, Hoffman U, Pope HG Jr. Cardiovascular toxicity of illicit anabolic-androgenic steroid use. *Circulation.* 2017;135(21):1991-2002.
3. Frati P, Busardo FP, Cipolloni L, De Dominicis E, Fineschi V. Anabolic androgenic steroid related deaths: autoptical, histopathological and toxicological findings. *Current Neuropharmacology.* 2015;13:146-159.
4. Kishner S et al. Anabolic steroid use and abuse. <http://emedicine.medscape.com/article/128655>. Updated May 27, 2015 (accessed September 27, 2017).
5. Pope HG Jr, Wood RI, Rogol A, Nyberg F, Bowers L, Bhasin S. Adverse health consequences of performance-enhancing drugs: an endocrine society scientific statement. *Endocr Rev.* 2014 Jun;35(3):341-375. [PMCID: PMC4026349]
6. US Department of Justice Drug Enforcement Administration Diversion Control Division. Steroid abuse by law enforcement personnel, a guide for understanding the dangers of anabolic steroids. March 2004 (accessed October 30, 2017). <https://www.deadiversion.usdoj.gov/pubs/brochures/steroids/lawenforcement>.
7. Van de Kerkhof DH, de Boer D, Thijssen JHH, Maes RAA. Evaluation of testosterone/epitestosterone ratio influential factors as determined in doping analysis. *Journal of Analytical Toxicology.* 2000;24:102-115.



Stacey Simons, M.D.

Associate Medical Examiner

Date Signed: 11/15/2017

SS



Web: www.axisfortox.com
Phone: (317) 759-4TOX

Final Review 11/14/2017

(S)

Laboratory Case Number: 3129656	Subject's Name: MCCARVER, DALLAS
Client Account: 20812 / PBME07 Physician: Report To: District 15 FL Medical Examine ATTN: Michael Bell, MD 3126 Gun Club Road West Palm Beach, FL 33406 FX: 561-688-4592	Agency Case #: 171423 Date of Death: 08/22/2017 Test Reason: Other Investigator: NOT INDICATED Date Received: 08/28/2017 Date Reported: 10/18/2017

Laboratory Specimen No: 40671529	Date Collected: 08/22/2017
Container(s): 01:RTB Blood, FEMORAL	Test(s): 70510 Comprehensive Drug Panel, Bloo
* * <i>AMENDED REPORT</i> * *	

Analyte Name	Result	Concentration	Units	Therapeutic Range	Loc
AMPHETAMINES	Negative				
BARBITURATES	Negative				
BENZODIAZEPINES	Negative				
CANNABINOIDS	POSITIVE				
THC	POSITIVE				
THC, Quant		6.1	ng/mL		
THC-COOH	POSITIVE				
THC-COOH, Quant		39.1	ng/mL		
COCAINE/METABOLITES	Negative				
FENTANYL	Negative				
METHADONE/METABOLITE	Negative				
OPIATES	Negative				
OXYCODONE/METABOLITE	Negative				
PHENCYCLIDINE	Negative				
PROPOXYPHENE/METABOLITE	Negative				
ALCOHOL	Negative				
Methanol	Negative				
Ethanol	Negative				
Acetone	Negative				
Isopropanol	Negative				
ANALGESICS	Negative				
ANESTHETICS	Negative				
ANTIBIOTICS	Negative				

MCCARVER, DALLAS

Laboratory Case #: 3129656

Printed Date/Time: 10/18/2017, 09:11



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Web: www.axisfortox.com

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Laboratory Specimen No: 40671529

Continued..

Analyte Name	Result	Concentration	Units	Therapeutic Range	Loc
ANTICONVULSANTS	Negative				
ANTIDEPRESSANTS	Negative				
ANTIHIISTAMINES	Negative				
ANTIPSYCHOTICS	Negative				
CARDIOVASCULAR AGENTS	Negative				
ENDOCRINE AGENTS	Negative				
GASTROENTEROLOGY AGENTS	Negative				
NARCOTICS	Negative				
NEUROLOGY AGENTS	Negative				
SEDATIVES/HYPNOTICS	Negative				
STIMULANTS	POSITIVE				
Caffeine	POSITIVE				
Analyte is qualitatively POSITIVE, but has not been confirmed by an alternate analytical method.					
UROLOGY AGENTS	Negative				

Specimens will be kept for at least one year from the date of initial report.

PLEASE NOTE: This is a revised report. Previous report on 09/07/17 did not indicate Anabolic Steroid Panel on Urine.

MCCARVER, DALLAS

Laboratory Case #: 3129656

Printed Date/Time: 10/18/2017, 09:11



FORENSIC TOXICOLOGY

Web: www.axisfortox.com

Phone: (317) 759-4TOX

Laboratory Specimen No: 40671530

Date Collected: 08/22/2017

Container(s): 01:UR Urine, Random

Test(s): 80080 Urine Analysis (R)
44030U Anabolic Steroids, Urine

Analyte Name	Result	Concentration	Units	Therapeutic Range	Loc
AMPHETAMINES	Negative				
Amphetamine	Negative				
Methamphetamine	Negative				
MDMA	Negative				
BENZODIAZEPINES	Negative				
Temazepam	Negative				
Lorazepam	Negative				
Alprazolam	Negative				
a-OH-Alprazolam	Negative				
Nordiazepam	Negative				
Oxazepam	Negative				
7-Aminoclonazepam	Negative				
BUPRENORPHINE/METABOLITE	Negative				
Buprenorphine	Negative				
Norbuprenorphine	Negative				
CARISOPRODOL/METABOLITE	Negative				
Meprobamate	Negative				
COCAINE/METABOLITES	Negative				
Benzoylecgonine	Negative				
FENTANYL	Negative				
Fentanyl	Negative				
Norfentanyl	Negative				
METHADONE/METABOLITE	Negative				
Methadone	Negative				
EDDP	Negative				
OPIATES	Negative				
Morphine	Negative				
6-Monoacetylmorphine	Negative				
Codeine	Negative				
Hydrocodone	Negative				
Hydromorphone	Negative				
Oxycodone	Negative				
Oxymorphone	Negative				

MCCARVER, DALLAS

Laboratory Case #: 3129656

Printed Date/Time: 10/18/2017, 09:11

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FORENSIC TOXICOLOGY

Web: www.axisfortox.com

Phone: (317) 759-4TOX

Laboratory Specimen No: 40671530

Continued..

Analyte Name	Result	Concentration	Units	Therapeutic Range	Loc
PHENCYCLIDINE	Negative				
Phencyclidine (PCP)	Negative				
TRAMADOL/METABOLITE	Negative				
Tramadol	Negative				
O-Desmethyltramadol	Negative				
ANABOLIC STEROIDS	POSITIVE				(1)
Testosterone		550	ng/mL		(1)
Synonym(s): 17beta-hydroxyandrost-4-en-3-one					
Epitestosterone		4.0	ng/mL		(1)
Synonym(s): 4-androsten-17alpha-ol-3-one					
T/EpiT Ratio		130		<6	(1)
A T/E ratio less than 4.0 is considered normal, while a ratio greater than or equal to 4.0 is considered an abnormal finding suggestive of testosterone use/abuse. This cut-off for the T/E ratio is recommended by the World Anti-Doping Agency.					
Bolasterone	Negative				(1)
Boldenone	Negative				(1)
Clostebol	Negative				(1)
Clostebol Metabolite	Negative				(1)
Clenbuterol	Negative				(1)
Drostanolone Metabolite	Negative				(1)
Norethandrolone	Negative				(1)
Fluoxymesterone	Negative				(1)
Methandrostenolone	Negative				(1)
Methandrostenolone Metabolite	Negative				(1)
Methenolone	Negative				(1)
Methyltestosterone	Negative				(1)
Nandrolone	Negative				(1)
Nandrolone Metabolite	Negative				(1)
Norandrostenedione	Negative				(1)
Norethandrolone Metabolite	Negative				(1)
Norethindrone	Negative				(1)
Oxandrolone	Negative				(1)
Oxymetholone Metabolite	Negative				(1)
Probenecid	Negative				(1)
Stanozolol	Negative				(1)

MCCARVER, DALLAS

Laboratory Case #: 3129656

Printed Date/Time: 10/18/2017, 09:11



Web: www.axisfortox.com
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Laboratory Specimen No: 40671530

Continued..

Analyte Name	Result	Concentration	Units	Therapeutic Range	Loc
Stanozolol Metabolite	Negative				(1)
Turinabol	Negative				(1)
Tetrahydrogestrinone	Negative				(1)
Trenbolone Metabolite	POSITIVE				(1)
Synonym(s): 17a-trenbolone					
Creatinine		1205	mg/L		(1)
U.S. Population (10th - 90th percentiles, median)					
All Participants: 335 - 2370 mg/L, median 1180 (n=22,245)					
Males: 495 - 2540 mg/L, median 1370 (n=10,610)					
Females: 273 - 2170 mg/L, median 994 (n=11,635)					

Performing Location(s):

- (1) National Medical Services
3701 Welsh Road, Willow Grove, PA 19090
Medical Director: G. John DiGregorio, MD, PhD, License #: 39D0197898



Web: www.axisfortox.com
Phone: (317) 759-4TOX

Laboratory Specimen No: 40671531	Date Collected: 08/22/2017
Container(s): 01:VIT_CON Vitreous,EYE	Test(s): 49901 Volatiles Not Performed

Analyte Name	Result	Concentration	Units	Therapeutic Range	Loc
< Volatile Testing Not Performed	>				

Due to negative blood, tissue, and/or urine volatile (Acetone, Ethanol, Isopropanol, and Methanol) results, volatile testing was not performed on the vitreous specimen.



FORENSIC TOXICOLOGY

Web: www.axisfortox.com

Phone: (317) 759-4TOX

Laboratory Specimen No: 40671532
Container(s): 01:GRT Blood,FEMORAL

Date Collected: 08/22/2017
Test(s): 49900 Not Tested

Analyte Name	Result	Concentration	Units	Therapeutic Range	Loc
< No Testing Performed	>				

MCCARVER, DALLAS

Laboratory Case #: 3129656

Printed Date/Time: 10/18/2017, 09:11



FORENSIC TOXICOLOGY

Web: www.axisfortox.com

Phone: (317) 759-4TOX

Laboratory Specimen No: 40671533
Container(s): 01:GRT Blood,FEMORAL

Date Collected: 08/22/2017
Test(s): 49900 Not Tested

Analyte Name	Result	Concentration	Units	Therapeutic Range	Loc
< No Testing Performed	>				

The Specimen identified by the Laboratory Specimen Number has been handled and analyzed in accordance with all applicable requirements.

Laboratory Director

MCCARVER, DALLAS

Case Reviewer

George S. Behonick, Ph.D., F-ABFT

Laboratory Case #:3129656

Print Date/Time:10/18/2017, 09:11

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This individual may not have performed any of the analytical work.



FORENSIC TOXICOLOGY

Web: www.axisfortox.com
Phone: (317) 759-4TOX

09/12/2017
ES

Laboratory Case Number: 3129656
Subject's Name: MCCARVER, DALLAS
Client Account: 20812 / PBME07
Physician:
Report To: District 15 FL Medical Examine
ATTN: Michael Bell, MD
3126 Gun Club Road
West Palm Beach, FL 33406
FX: 561-688-4592
Agency Case #: 171423
Date of Death: 08/22/2017
Test Reason: Other
Investigator: NOT INDICATED
Date Received: 08/28/2017
Date Reported: 09/07/2017

Laboratory Specimen No: 40671529
Date Collected: 08/22/2017
Container(s): 01:RTB Blood,FEMORAL
Test(s): 70510 Comprehensive Drug Panel, Bloo

Table with 6 columns: Analyte Name, Result, Concentration, Units, Therapeutic Range, Loc. Rows include AMPHETAMINES, BARBITURATES, BENZODIAZEPINES, CANNABINOIDS, THC, THC-COOH, COCAINE/METABOLITES, FENTANYL, METHADONE/METABOLITE, OPIATES, OXYCODONE/METABOLITE, PHENCYCLIDINE, PROPOXYPHENE/METABOLITE, ALCOHOL, Methanol, Ethanol, Acetone, Isopropanol, ANALGESICS, ANESTHETICS, ANTIBIOTICS.



Web: www.axisfortox.com
Phone: (317) 759-4TOX

Laboratory Specimen No: 40671529

Continued..

Analyte Name	Result	Concentration	Units	Therapeutic Range	Loc
ANTICONVULSANTS	Negative				
ANTIDEPRESSANTS	Negative				
ANTI-HISTAMINES	Negative				
ANTI-PSYCHOTICS	Negative				
CARDIOVASCULAR AGENTS	Negative				
ENDOCRINE AGENTS	Negative				
GASTROENTEROLOGY AGENTS	Negative				
NARCOTICS	Negative				
NEUROLOGY AGENTS	Negative				
SEDATIVES/HYPNOTICS	Negative				
STIMULANTS	POSITIVE				
Caffeine	POSITIVE				
Analyte is qualitatively POSITIVE, but has not been confirmed by an alternate analytical method.					
UROLOGY AGENTS	Negative				

Specimens will be kept for at least one year from the date of initial report.

MCCARVER, DALLAS

Laboratory Case #: 3129656

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FORENSIC TOXICOLOGY

Web: www.axisfortox.com

Phone: (317) 759-4TOX

Laboratory Specimen No: 40671530

Date Collected: 08/22/2017

Container(s): 01:UR Urine, Random

Test(s): 80080 Urine Analysis (R)

Analyte Name	Result	Concentration	Units	Therapeutic Range	Loc
AMPHETAMINES	Negative				
Amphetamine	Negative				
Methamphetamine	Negative				
MDMA	Negative				
BENZODIAZEPINES	Negative				
Temazepam	Negative				
Lorazepam	Negative				
Alprazolam	Negative				
a-OH-Alprazolam	Negative				
Nordiazepam	Negative				
Oxazepam	Negative				
7-Aminoclonazepam	Negative				
BUPRENORPHINE/METABOLITE	Negative				
Buprenorphine	Negative				
Norbuprenorphine	Negative				
CARISOPRODOL/METABOLITE	Negative				
Meprobamate	Negative				
COCAINE/METABOLITES	Negative				
Benzoylecgonine	Negative				
FENTANYL	Negative				
Fentanyl	Negative				
Norfentanyl	Negative				
METHADONE/METABOLITE	Negative				
Methadone	Negative				
EDDP	Negative				
OPIATES	Negative				
Morphine	Negative				
6-Monoacetylmorphine	Negative				
Codeine	Negative				
Hydrocodone	Negative				
Hydromorphone	Negative				
Oxycodone	Negative				
Oxymorphone	Negative				

MCCARVER, DALLAS

Laboratory Case #: 3129656

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FORENSIC TOXICOLOGY

Web: www.axisfortox.com

Phone: (317) 759-4TOX

Laboratory Specimen No: 40671530

Continued..

Analyte Name	Result	Concentration	Units	Therapeutic Range	Loc
PHENCYCLIDINE	Negative				
Phencyclidine (PCP)	Negative				
TRAMADOL/METABOLITE	Negative				
Tramadol	Negative				
O-Desmethyltramadol	Negative				

MCCARVER, DALLAS

Laboratory Case #: 3129656

Printed Date/Time: 09/07/2017, 13:01

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Web: www.axisfortox.com
Phone: (317) 759-4TOX

Laboratory Specimen No: 40671531	Date Collected: 08/22/2017
Container(s): 01:VIT_CON Vitreous,EYE	Test(s): 49901 Volatiles Not Performed

Analyte Name	Result	Concentration	Units	Therapeutic Range	Loc
< Volatile Testing Not Performed	>				

Due to negative blood, tissue, and/or urine volatile (Acetone, Ethanol, Isopropanol, and Methanol) results, volatile testing was not performed on the vitreous specimen.



FORENSIC TOXICOLOGY

Web: www.axisfortox.com

Phone: (317) 759-4TOX

Laboratory Specimen No: 40671532
Container(s): 01:GRT Blood,FEMORAL

Date Collected: 08/22/2017
Test(s): 49900 Not Tested

Analyte Name	Result	Concentration	Units	Therapeutic Range	Loc
< No Testing Performed	>				

MCCARVER, DALLAS

Laboratory Case #: 3129656

Printed Date/Time: 09/07/2017, 13:01

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FORENSIC TOXICOLOGY

Web: www.axisfortox.com

Phone: (317) 759-4TOX

Laboratory Specimen No: 40671533	Date Collected: 08/22/2017
Container(s): 01:GRT Blood,FEMORAL	Test(s): 49900 Not Tested

Analyte Name	Result	Concentration	Units	Therapeutic Range	Loc
< No Testing Performed	>				

The Specimen identified by the Laboratory Specimen Number has been handled and analyzed in accordance with all applicable requirements.

Laboratory Director

MCCARVER, DALLAS

Case Reviewer

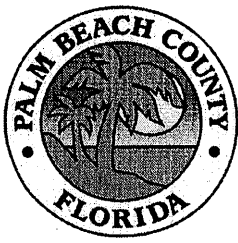
George S. Behonick, Ph.D., F-ABFT

Laboratory Case #:3129656

Print Date/Time:09/07/2017, 13:01

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This individual may not have performed any of the analytical work.



Palm Beach County Medical Examiner's Office

Name: Dallas McCarver

Case Number: 17-1423

Notified By: Detective Lazarus Kimsal

Agency: Boca Raton Police Department

Date Notified: 08-22-2017

Prepared By: Heron Ruiz, Forensic Investigator

Agency Case #: 17-011761

Time Notified: 0200

I received a phone call from a Palm Beach County Sheriff's Office dispatcher on Tuesday, August 22, 2017 at about 2:00 a.m., asking me to call Detective Lazarus Kimsal from the Boca Raton Police Department.

I called Detective Kimsal at the phone number provided to me. He said that he called the Palm Beach County Medical Examiner's Office to report the death of a 26 year old white male named Dallas McCarver (DOB: 04-09-1991), who was visually identified by a friend and a Florida driver's license.

Detective Kimsal reported that his preliminary investigation revealed that the decedent is a well-known body builder and has competed professionally for several years. The decedent is reported to have a history of long-term muscle enhancement supplements (steroids) mixed with Insulin and other growth hormone supplements. The decedent's friend reported that he last saw the decedent alive the previous night at about 10:30 p.m., when he, himself, left the apartment to go to the gym. He left the decedent cooking dinner and appearing in his usual condition. He returned to the apartment at about midnight at which time he found the decedent unresponsive on the living room floor with food scattered around the area. Medics from the Boca Raton Fire Rescue responded to the scene where they found the decedent unresponsive. The medics initiated resuscitative efforts and transported him to the Emergency Room at Delray Medical Center where Dr. Brian Ackerman pronounced his death at 1:03 a.m.

The decedent collapsed while at a body building competition in March 2017. The decedent went to West Boca Medical Center for an examination after returning to Florida following the near collapse on stage. The decedent underwent some tests but never returned to a doctor for follow up even though it was suggested.

Detective Kimsal reported that multiple medications and muscle enhancement medications were found at the scene. There was nothing on the body or at the scene to suggest foul play. He visually examined the body at the hospital. He reported that the decedent was extremely muscular and had a very large build. He did not see any obvious injuries. He said that he would ensure that the decedent's mother is notified of the death.

I dispatched Elite Body Removal Service to the hospital to retrieve the body and the accompanying medical records.

The hospital medical records state that the decedent was received at the hospital in full cardiac arrest. The decedent is reported to have a history of injecting insulin even though he is not diabetic and uses numerous steroids. The decedent did not respond to any treatment and was ultimately pronounced dead.

I talked to mother later in the day. She reported that her son suffered from child hood asthma but that he seemed to have grown out of it. She acknowledged his steroid use and questioned whether this is what caused his death. She acknowledged that her son's father and his family had a history of heart disease related deaths.

I requested a copy of the decedent's medical records from West Boca Medical Center from his visit in March 2017. I received the medical records later in the day, August 22, 2017. The medical records state that the decedent was seen in the ER on March 20, 2017. He is reported to have walked into the hospital with complaints of a chronic cough and difficulty breathing. The decedent reported that he'd been sick with an upper respiratory infection for the past month. He apparently did not remember passing out during his bodybuilding competition a week earlier. The decedent denied any actual medical history other than childhood asthma, which he outgrew and a previous shoulder surgery. The decedent was treated with oxygen and steroids and reported feeling better. He was able to walk out of the hospital on his own and stated that he would follow up with a Cardiologist.

The decedent also saw Dr. Martin Bloom during this time. I requested a copy of the medical records from Dr. Bloom's Office and also medical records from Jackson Clinic in Jackson Tennessee (previous medical records dating back to before 2015) which is included in the Palm Beach County Medical Examiner's case file.

Nothing Further