



NATIONAL TRANSPORTATION SAFETY BOARD

Office of Research and Engineering
Washington, DC

Medical Factual Report

July 11, 2017

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Chief Medical Officer

A. ACCIDENT: HWY16SH024; Old Saybrook, CT

Accident Type: Fatal pedestrian collision with automobile
Location: Maple Avenue in Old Saybrook, Connecticut
Date and Time: August 16, 2016; about 8:00 p.m.
Vehicle: 2007 Toyota, FJ Cruiser, Sport Utility Vehicle
Operator: 73-year-old male
Pedestrian: 89-year-old male
Fatalities: 1

B. GROUP IDENTIFICATION

No group was formed for the medical evaluation in this accident.

C. DETAILS OF INVESTIGATION

1. Purpose

This investigation was performed to evaluate the driver for any medical conditions and the effects of his use of medications.

2. Methods

The driver's primary care, hospital, and ophthalmology records were reviewed.

Primary Care Records

Records were obtained from the 73 year old male driver's primary care physician for care between September 2014 and his last visit before the accident (in June, 2016). According to these records, the driver had type 2 diabetes, hypertension, high cholesterol, symptoms from an enlarged prostate, and a had undergone a hernia repair during this period. At the last visit in the records, in June 2016, his medications included Janumet, valsartan, Crestor, low dose aspirin, Avodart, and Flomax.

Janumet is a combination medication containing sitagliptin and metformin, two medications used to decrease blood sugar in patients with diabetes.¹ Valsartan (also marketed with the name Diovan) is used to treat high blood pressure.² Crestor (generic name rosuvastatin) is used to treat high cholesterol.³ Aspirin at low doses is used to inhibit platelet function and help prevent heart attacks. Avodart (generic name dutasteride) and Flomax (generic name tamsulosin) are used to treat the symptoms of an enlarged prostate.^{4,5} These medications are not generally considered directly impairing.

At the time of his last blood work before the accident, the driver was found to have controlled cholesterol (total cholesterol of 107), and a hemoglobin A1C of 6.7%. Hemoglobin A1C is a measure of the percentage of hemoglobin molecules that have a glucose molecule attached to them (what percentage have been glycosylated). It is used as a measure of average blood glucose over the preceding several weeks. Non-diabetic levels are below 5.4%. Between 5.5% and 6.4% is considered “pre-diabetes” and above 6.5% indicates diabetes. For diabetic individuals, levels below 7.0% are considered “good control.”⁶ The remainder of his blood work was normal.

Hospital Records

According to records from inpatient medical care between October 2014 and November 2015, the driver had had a pacemaker implanted in 2007 for symptomatic bradycardia from sick sinus syndrome. The device required a battery change in November 2015. He had surgery to repair a recurrent inguinal hernia in September 2015. The driver had also been admitted in January 2015 for neurologic evaluation of episodes of a “sinking feeling” in his head without associated focal findings or fainting.

¹ National Institutes of Health. US National Library of Medicine. DailyMed. Janumet. <https://dailymed.nlm.nih.gov/dailymed/drugInfo.cfm?setid=d19c7ed0-ad5c-426e-b2df-722508f97d67> Accessed 7/11/2017.

² National Institutes of Health. US National Library of Medicine. DailyMed. Valsartan. <https://dailymed.nlm.nih.gov/dailymed/drugInfo.cfm?setid=9402b022-5809-4251-dfef-54f6ef5723fe> Accessed 7/17/2017.

³ National Institutes of Health. US National Library of Medicine. DailyMed. Crestor. <https://dailymed.nlm.nih.gov/dailymed/drugInfo.cfm?setid=bb0f3b5e-4bc6-41c9-66b9-6257e2513512> Accessed 7/17/2017.

⁴ National Institutes of Health. US National Library of Medicine. DailyMed. Avodart. <https://dailymed.nlm.nih.gov/dailymed/drugInfo.cfm?setid=dc330e70-a1d3-400b-3aaf-46067e3fd090> Accessed 7/17/2017.

⁵ National Institutes of Health. US National Library of Medicine. DailyMed. Flomax. <https://dailymed.nlm.nih.gov/dailymed/drugInfo.cfm?setid=c00d5f7b-dad7-4479-aae2-fea7c0db40ed> Accessed 7/17/2017.

⁶ American Diabetes Association, Standards of Medical Care in Diabetes—2016, Volume 39, Supplement 1, January 2016. http://care.diabetesjournals.org/highwire/filestream/5646/field_highwire_adjunct_files/0/2016-Standards-of-Care.pdf Accessed 7/16/2017.

The neurology evaluation did not identify a source for the symptoms. He was seen in the Emergency Department in October 2014 for episodes of dizziness without loss of consciousness. No definitive diagnosis was made at that time.

Ophthalmology Records

According to records obtained from the driver's ophthalmologist (eye doctor) regarding a visit on March 11, 2016, where the driver complained of slowly worsening vision in both eyes, particularly when driving. The examination revealed distant vision of 20/80 (with 2 errors) in the right eye and 20/60 (with 2 errors) in the left eye. His near vision was documented as 20/400 (with 2 errors) in each eye. In addition, the driver had cataracts in both the central (2-3+) and peripheral areas (1-2+) of the lenses of both eyes.⁷ The initial physician also identified an abnormality of the retina that he was concerned might be a cancer. The driver was prescribed glasses for distant and near vision and referred to a retinal specialist. If the retinal abnormality was not cancer, the plan was to remove the cataracts. This had not been performed at the time of the accident.

A cataract is an area of clouding of the lens of the eye. Symptoms include cloudy or blurry vision; seeing faded colors, glare from point sources of light, and halos around lights; as well as the diminished ability to perceive color and contrast in low lighting conditions, such as at night. When a cataract progresses to the point that a person can no longer see well during the day or pass a vision test, the symptoms are usually significant enough that the person will seek treatment.⁸

Post Accident Toxicology Testing

Alcohol and urine drug testing was carried out on the driver by law enforcement following the accident and was negative. (See attachment to the brief - State of Connecticut Toxicology Report – Driver)

⁷ Cataracts are graded for size on a scale of 1-4. Those rated a "1" are smaller; those rated a "4" are much larger and more dense.

⁸ "Facts About Cataract," https://nei.nih.gov/health/cataract/cataract_facts.

D. SUMMARY OF MEDICAL FINDINGS

The 73 year old male driver had a history of bradycardia requiring a pacemaker, well controlled type 2 diabetes (recent hemoglobin A1C of 6.7%), hypertension, high cholesterol, and symptoms from an enlarged prostate. In June 2016, his medications included Janumet, Valsartan, Crestor, low dose aspirin, Avodart, and Flomax. These medications are not generally considered impairing. In March 2016, his distant vision was 20/80 (with 2 errors) in the right eye and 20/60 (with 2 errors) in the left eye and his near vision was 20/400 (with 2 errors) in each eye. In addition, the driver had cataracts in both the central (2-3+) and peripheral areas (1-2+) of the lenses of both eyes. He was prescribed glasses for both distant and near vision and the eye doctor had suggested cataract surgery.