

Nutrient Deprivation II

THE FALL OF A SOCIAL CLIMBER

FROM THE PROVIDENCE JOURNAL: July 9th, 2011
PROMINENT NEWPORT CITIZEN FOUND UNCONSCIOUS

NEWPORT, RI. Newport resident Florence Van de Camp was found unconscious this morning in her Bellevue Avenue home, “Crossways”, by her husband, Brock Van de Camp. A bottle of whiskey was found spilled on the floor near her body. She was rushed by helicopter to Rhode Island Hospital and has not yet recovered consciousness.

Van de Camp, 64, inherited Crossways from her family, the Olens, who have maintained a mansion in Newport since the early 1900s. Florence has continued her family’s practice of charitable giving, with an emphasis on entrepreneurship and education; more recently, she has concerned herself with questions of healthy body image among young women. She is a member of multiple organizations, including the Junior League, the South County Equestrian Society, and the Yacht Club. She married Brock Van de Camp, now 38, in 2006.

Mr. Van de Camp stated, “Poor Florence has been so unhappy these last couple of years,” he added, “She was drinking heavily again and refused to eat. Every now and then I would find a liquor bottle hidden behind a book.”

Mrs. Van de Camp remains unconscious in Rhode Island Hospital, where Mr. Van de Camp visits her every day. The rest of the time, he can be found at the Fair Winds Country Club, where he is working on his tennis game, “trying to keep busy and take his mind off the tragedy.”

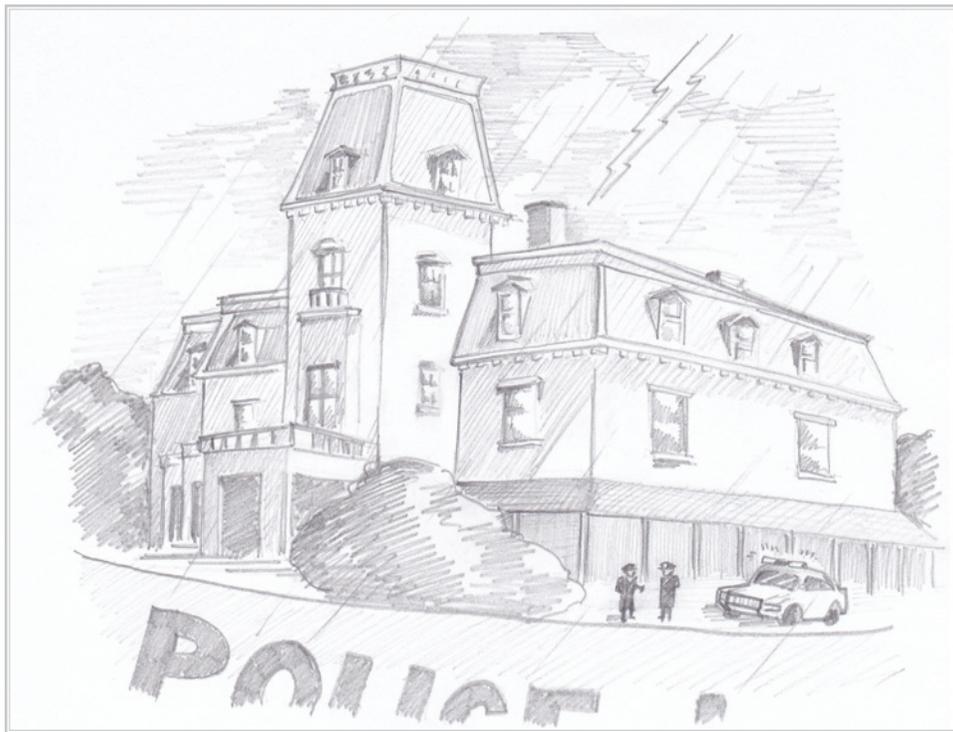
FROM THE PROVIDENCE JOURNAL: July 15th, 2011
VAN DE CAMP MAY HAVE BEEN POISONED, EXPERTS SAY

NEWPORT, RI. Medical investigation suggests that the comatose state of Florence Van de Camp, the well-known charitable giver and woman-about-town found unconscious in her luxurious Newport home on Saturday, may have been deliberately induced. Mrs. Van de Camp’s condition deteriorated rapidly over the last few days and she passed away from complications due to brain damage on July 11th.

In attempting to diagnose and stabilize Mrs. Van de Camp’s condition, attending physician Dr. Amos Charles noted a precipitously low blood glucose level as well as unusually high levels of insulin in her bloodstream, but unusually low levels of a molecule known as C-peptide.

“In the body, Insulin, the hormone responsible for lowering blood glucose, and C-peptide are always found together,” Dr. Charles said in an interview yesterday. “If one is high, the other is high, and so on. If insulin is high but C-peptide is low, something is very wrong. At first, given her history of alcoholism and anorexia, we thought that it might be a case of alcohol induced hypoglycemia. Now I think it seems more like murder.”

While insulin produced in the body is always accompanied by C-peptide, Dr. Charles explained, synthetic insulin is not. Mrs. Van de Camp is not a diabetic, but



these unusual blood test results made him curious enough to look for needle punctures where insulin might have been injected.

Mr. Van de Camp assured our reporters that to his knowledge, his wife had not been prescribed any intravenous drugs or other substances since her hospitalization for anorexia two years ago, but given her perilous emotional state she could have been using anything in an attempt to find peace.

FROM THE PROVIDENCE JOURNAL: August 3rd, 2011
NEW EVIDENCE IN VAN DE CAMP CASE

NEWPORT, RI. Investigators have revealed new, potentially incriminating evidence in the case of Florence Van de Camp of Newport. Mrs. Van de Camp's husband Brock has been detained on suspicion of poisoning his wife with insulin supplied by Christina Mazzucchelli.

Mr. Van de Camp, an avid tennis player, has frequently been seen in the company of Ms. Mazzucchelli—a former competitor in the U.S. Women's Open and now coaching tennis at the Fair Winds Country Club—since several months before his wife's fatal incident. Ms. Mazzucchelli has Type 1 Diabetes Mellitus and must inject synthetic insulin daily to keep her blood glucose levels low. The injections that keep her alive can kill someone whose body produces its own insulin and whose blood glucose does not need to be lowered.

Investigators have also questioned Ms. Mazzucchelli but have not yet determined whether she was a deliberate accessory to the crime.

FROM THE PROVIDENCE JOURNAL: January 18th, 2012
BROCK VAN DE CAMP CONVICTED

PROVIDENCE, RI. A jury has convicted Brock Van de Camp, 39, of Newport, of murdering his wife, Florence Van de Camp, by injecting her with insulin.

Under cross-examination, Van de Camp revealed that he and Mrs. Van de Camp, who inherited many millions from her family, signed a pre-nuptial agreement guaranteeing him 60% of her fortune upon her death unless he was unfaithful to her during her lifetime.

“But if she caught me playing around, I got a flat thousand,” Van de Camp told the prosecuting attorney indignantly, adding that he had hoped his wife’s history of alcoholism and anorexia would explain her death. The jury was out for seven minutes before asserting their confidence in Mr. Van de Camp’s guilt.

Dr. Amos Charles testified to the presence of insulin and absence of C-peptide in Mrs. Van de Camp’s blood, and explained for the court the mechanism by which insulin lowers glucose levels. His testimony is believed to have been essential in securing a conviction. Christina Mazzucchelli, from whom Mr. Van de Camp stole the insulin that induced his wife’s coma, also took the stand during the trial but has been cleared of any deliberate participation in the crime. “Chris didn’t know what I was doing,” Mr. Van de Camp claimed. “I snuck her syringe out of her bag.” Ms. Mazzucchelli was not available for comment. Sentencing will take place tomorrow.

Scientific Connection

Dr. Charles would have explained to the court that the brain is dependent on a constant supply of glucose from the blood for proper functioning and immediate survival. Glucose is the primary source of energy for the brain and its deprivation, even for a few minutes, can lead to tissue destruction and fatal losses of brain function. The brain is essential to survival because it controls vital functions like heart rate and the ability to breathe. If the brain dies then the rest of the body will soon follow. Survival therefore depends on maintaining a constant blood glucose level.

Blood glucose levels are maintained by the actions of two different sets of hormones. Insulin is responsible for lowering blood glucose after a carbohydrate-rich meal while the counter-regulatory hormones (glucagon, adrenaline, cortisol) are responsible for raising it during fasts. If too much insulin is present in the blood, then blood glucose can drop to lethally low levels.

Florence van de Camp’s blood glucose dropped so far that part of her brain died. The regenerative potential of neurons (the cells responsible for the electrical signal conduction in the brain) is clinically nonexistent. Enough of Florence’s brain was left functioning so that she could still breathe and her heart could beat fast enough to keep her alive, but the potential for conscious thought and movement was destroyed. Her husband injected her with more insulin during one of his hospital visits to destroy the rest of her brain and complete the murder he botched the first time.

Insulin is normally produced and secreted into the blood by the pancreas. However, the insulin that is made in the pancreas is a much larger molecule than gets secreted into the blood. Before insulin is secreted part of it—the C-peptide—is cut off and gets pumped into the blood along with, but separately from, the insulin. If Florence's own body had produced the insulin that caused her brain damage, her C-peptide levels would have been as high as her insulin levels.

People with Type I Diabetes Mellitus do not produce enough insulin to reduce their blood sugar to a safe level so they are required to take insulin by injection to maintain normal blood glucose levels. The type of insulin used to treat Type I Diabetes Mellitus is synthetic and does not contain C-peptide, so the fact that Florence's blood had a lot of insulin but very little C-peptide indicates that she had been injected with a high dose of artificial insulin. Since no one shoots insulin for fun, this led investigators to suspect that her coma was a result of an attempted murder. Brock relied on the town gossip about his wife's anorexia and alcoholism as well as a planted liquor bottle [see the "Drunkorexia" story] to suggest that her death was due to alcohol-induced hypoglycemia, leaving him free to start a new life as a merry widower with Christina Maz-zuchelli—on Florence's money.

Though this is a pretty twisted scenario, it is very similar to an actual case of hypoglycemia that put Sunny von Bulow, a wealthy socialite, into a coma for 28 years before she died. It is widely believed that her husband Klaus precipitated her coma by injecting her with insulin. The incident led to several highly publicized trials that were dramatized in the film *Reversal of Fortune*. You can read more about this saga of horror and hypoglycemia here: http://en.wikipedia.org/wiki/Sunny_von_B%C3%BClow.

↪ **Take Home Message** ←

Insulin overdoses can precipitate hypoglycemia and cause serious brain damage and death. Insulin should be treated with respect and never misused.