

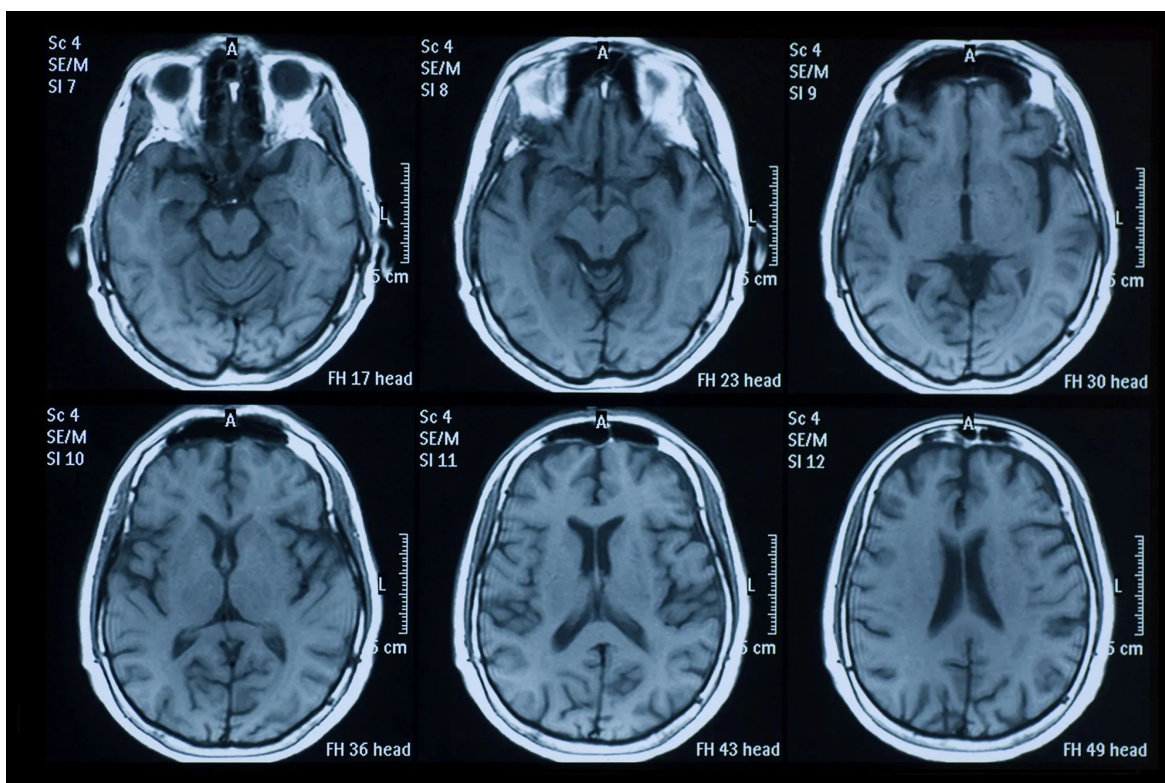
NEWS DESK

NO VISIBLE BRUISES: DOMESTIC VIOLENCE AND TRAUMATIC BRAIN INJURY

By Rachel Louise Snyder

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In the first version of her story, Grace Costa says that, on the night after Christmas, in 2012, her ex-boyfriend broke into her house, hid behind her bedroom door, and then attacked her as she and her two grown children—a son and a daughter—were about to eat dinner. In the second version, it's still the night after Christmas, but it might be 2013, and only her daughter is at home with her. There's a half-eaten apple on the floor of the kitchen; she remembers asking her daughter if she'd thrown it toward the garbage and missed. She also remembers thinking that she'd left the outside light on and then it was off.



The vast majority of domestic-violence victims who show signs of traumatic brain injury never receive a formal diagnosis. Temet / Getty

Costa (whose name has been changed) describes the night in disjointed phrases. She cries and then stops. She spirals out from the story into another, and it takes some nudging to get her to return to the original. She knows she somehow got wrapped in a cord, and she comes back to this over and over. It was a phone cord, she thinks. “I don’t know where that cord came from,” she says. Then, later, “I don’t know where he got that cord.” Her hands were bound somehow, and then she fell to the ground. She was inside, and then she was outside. She remembers her ex-boyfriend punching her daughter in the face, blood spurting from her nose.

Local newspapers said the police arrived when she was on the ground. She was down, then up. Maybe down again. Thrown against the car, hard. Punched. Strangled. She was trying not to black out. There was blood, and that cord, and her daughter. The police weren't there, and then they were. The night comes in flashes, an image at a time—apple, blood, cord—but the pieces never fit together into a whole. Instead, they hang untethered in her mind. “I don't remember much of anything half the time,” she says.

Costa has a mild brain injury from that night, though she does not recall this exact diagnosis. She also has vertigo, hearing loss, poor memory, anxiety, headaches, ringing in her ears (which she describes as a constant “electrical signal”), and a hip that causes her to limp sometimes, which she believes came from being hurled against her car. In light of her other injuries, she hasn't had her hip treated.

After the police arrived, Costa, her daughter, and her ex-boyfriend were all taken to the same emergency room. She remembers that the hospital was overwhelmingly busy, and that her attacker was still nearby. She had a sense of being in shock. She was released that same night, but for the next two weeks she had pain in her neck, her head, and her throat. She had difficulty breathing. She was covered in bruises, and her scalp ached. She saw her primary-care doctor in the days after the attack, had CT scans of her head and neck, and took a lethality-assessment screening at a local crisis center, where she was deemed high risk for domestic-violence homicide. Her ex-boyfriend was found guilty of attempted murder and is now in prison. But even with him gone, her life is a constant reminder of that night. She forgets to do things, and when and how things happened: when she lived where, when she moved, when she filed this or that paperwork. Concentration sometimes gives her headaches. She is able to work full time, in health care, but she spends most of her free time alone. Her ex-boyfriend will be out of jail in several years, and she lives in terror of that moment, caught inside her own disquieting anguish.

Fifty per cent of domestic-violence victims are strangled at some point in the course of their relationship—often repeatedly, over years—and the overwhelming majority of strangulation perpetrators are men. Those strangled to the point of losing consciousness are at the highest risk of dying in the first twenty-four to forty-eight hours after the incident, from strokes, blood clots, or aspiration (choking on their own vomit). Such incidents can cause brain injury—mild or traumatic—not only by cutting off oxygen to the brain but because they are often accompanied by blunt-force trauma to the head. Still, victims of domestic violence are not routinely screened for strangulation or brain injury in emergency rooms, and the victims themselves, who tend to have poor recollections of the incidents, are often not even aware that they've lost consciousness. This means that diagnoses are rarely formalized, the assaults and injuries are downplayed, and abusers are prosecuted under lesser charges.

Gael Strack, the chief executive officer of the Training Institute on Strangulation Prevention, is one of the domestic-violence community's most prominent voices on strangulation and its attendant issues. In 1995, when she was the assistant district attorney in San Diego, two teen-age girls were killed “on her watch,” as she puts it. In the weeks before one of the girls' death—she was stabbed in front of her girlfriends—she had been strangled. The police were summoned, but when they showed up she recanted and no charges were filed. The other girl was strangled and set on fire. Both girls had sought domestic-violence services and had developed safety plans. Strack believed that San Diego was at the forefront of aggressive domestic-violence intervention. They even had a dedicated domestic-violence council and court. “We had specializations everywhere,” Strack says.

Strack and Casey Gwinn, the co-founder of the Training Institute and her boss at the time, felt responsible for the girls' deaths in some way. What had they missed? What would have kept the girls alive? Strack went back and studied the case files of three hundred non-fatal domestic-violence strangulation cases. Strangulation turned out to be a critical marker. Not only did it dramatically increase the chances of domestic-violence homicide, but only fifteen per cent of the victims in the study turned out to

have injuries visible enough to photograph for police reports. As a result, the officers often downplayed the incidents, listing injuries like “redness, cuts, scratches, or abrasions to the neck.” And emergency rooms tended to discharge victims without CT scans and MRIs. What Strack and the domestic-violence community understand today is that most strangulation injuries are internal, and that the very act of strangulation turns out to be the penultimate abuse by a perpetrator before a homicide. “Statistically, we know now that once the hands are on the neck the very next step is homicide,” Sylvia Vella, a clinician and a detective in the domestic-violence unit at the San Diego Police Department, says. “They don’t go backwards.”

In many of those three hundred strangulation cases, Strack also saw that the victims had urinated or defecated—an act she chalked up to their fear. She spoke to an emergency-room physician named George McClane who offered her a very different view. Urination and defecation are physical functions, like sweating and digestion, that happen below our consciousness, and are controlled by the autonomic nervous system. Sacral nerves in the brain stem—the final part of the brain to expire—control the sphincter muscles. So urination and defecation weren’t a sign of fear, McClane showed Strack, but rather evidence that every one of those victims had been mere moments away from death. And each one of those cases had been prosecuted as a misdemeanor.

Strack made it her mission to train those in the domestic-violence field—from police officers to dispatchers to shelter workers to attorneys—on the signs of strangulation. Since the mid-nineteen-nineties, she and Gwinn have travelled the country holding trainings sessions that cover anatomy, investigation, prosecution, and victim safety in strangulation cases; Gwinn estimates that they’ve trained more than fifty thousand people. In 2011, Strack and Gwinn helped to launch the Training Institute on Strangulation Prevention with a grant from the Office of Violence Against Women. Based in San Diego, the Institute conducts four-day sessions to “train the trainers” with the help of an advisory group that includes doctors, nurses, judges, survivors, police officers, and prosecutors.

In 2013, Gwinn, Strack, and several other leading voices in the domestic-violence community submitted briefs to the Supreme Court sentencing commission outlining the particular danger of strangulation and suffocation. Last year, the Supreme Court added language to its sentencing-commission report that specifically addressed strangulation and suffocation, recommending increased prison time for those found guilty. Today, thirty-eight states prosecute strangulation as a felony, and “every jurisdiction that has prosecuted strangulation as a felony with a multidisciplinary team has seen a drop in homicides,” according to Gwinn. Maricopa County, in Arizona, for example, saw its domestic-violence homicide rate drop by thirty per cent between 2012 and 2014. Maricopa County Attorney Bill Montgomery told me, “When you look at the objective data, you could say where we have focussed on domestic-violence strangulation cases, and improved our ability to investigate, charge, and prosecute, we have also seen a significant corollary drop in domestic-violence homicides.”

Still, for any kind of prosecution, both strangulation and brain injury need to be recognized and diagnosed. And, from a medical standpoint, those first twenty-four to forty-eight hours after strangulation are crucial for victims, according to Jacquelyn Campbell, the lead author on a new study that examines the effect of brain injuries from domestic violence on victims’ central nervous systems. Sylvia Vella, who wrote her dissertation on strangulation, remembers a woman from her research who had such severe bruising around her neck and ear that Vella sent her immediately to the emergency room, where doctors discovered a dissected carotid artery. The woman called Vella from the hospital and said that she’d been put in a secure room under a pseudonym. “No one knows why she didn’t have a stroke,” Vella says. “The physicians were, like, ‘I can’t believe she survived.’”

While strangulation is now well documented in medical literature, traumatic brain injury is only starting to be addressed in the larger domestic-violence community. The vast majority of domestic-violence victims who show signs of T.B.I. never receive a

formal diagnosis, in part because they rarely have visible injuries, and so emergency rooms don't generally screen them for it. "We're really good now ... if a kid comes in with an athletic injury, or someone's been in a car accident, about working people up for post-concussive syndrome," Campbell says. Such symptoms include vision and hearing problems, seizures, ringing ears, memory loss, headaches, and blacking out. "But somehow, we're not as good with victims" of domestic violence, she says. "We're not saying, 'O.K., did you lose consciousness for those bruises? Have you had prior strangulations and/or head injuries?'" So we need to do a better job of applying that protocol to abused women."

There is an emergency-room screening tool that aims to identify victims of domestic violence with a potential T.B.I., called HELPPS, but its use is neither widespread nor standardized. Audrey Bergin, the director of a domestic-violence advocacy group called the DOVE Program, at Northwest Hospital, in Maryland, says that, while the HELPPS tool isn't used in their emergency room, a nurse reviews patients' medical records in their domestic-violence cases and looks for possible T.B.I. events. Such women would have been labelled "difficult" in the recent past, even by her staff members, she wrote in an e-mail. "The police may dismiss them as being drunk, the state's attorney may think they have mental illness.... Even the medical profession may dismiss them as being overdramatic. We have been able to intervene on their behalf to help other agencies understand that it is the T.B.I. that is causing some of these behaviors and symptoms."

The barriers to diagnosis and treatment are sometimes even more basic. Not every hospital is equipped with an MRI machine, and even those that are may not have personnel available at all times. Victims in rural or low-income areas would almost certainly have to be transported to trauma centers, which is prohibitively expensive. Add to this a lack of training and awareness among first responders and emergency personnel, and many victims spend their lives grappling with the consequences of an undiagnosed, untreated, unsupported injury, about which the narrative almost inevitably turns hostile: that they are crazy, or somehow to blame. Advocates talk of women who've lost jobs and custody of their children. Vella recalls one woman from her research whose "life was completely ruined" by brain injuries caused by strangulation. She'd lost her job, moved back in with her parents, and had to be escorted wherever she went. "She gets to the porch and can't remember where she was going," Vella says. She tells of another woman she studied who lost the ability to read and write; child protective services took her children because they felt she couldn't care for them. (Vella says that this woman is relearning the alphabet, reading simple newspaper stories, and has since regained custody of her children.)

It is not uncommon for victims of domestic violence like Costa to have trouble remembering the incidents that land their partners in trouble. They were in one part of the house and then suddenly another, and they can't remember the sequence of events. Their explanation of what happened is cloudy, and law enforcement and courtrooms put the burden of proof on them. To the untrained, they sound like liars. Often, they sound hysterical. What researchers have learned from combat soldiers and football players and car-accident victims is only now making its way into the domestic-violence community: that the poor recall, the recanting, the changing details, along with other markers, like anxiety, hyper-vigilance, and headaches, can all be signs of T.B.I.

Strack also points out how the emotional component of T.B.I. in cases of domestic violence complicates the lives of survivors. Veterans, for example, have the benefit of a support network when they're injured. Family, friends, medical personnel, and fellow-survivors are all explicit supporters of the injured party. But domestic violence continues to be seen as a mostly private issue. One woman I spoke with, whose ex had been found guilty of torture and was given a life sentence, talked about the shame she felt knowing that she'd ended up in an abusive relationship. "I was profoundly embarrassed," she says. "You think of someone who's poor, who's uneducated, who doesn't have resources. I thought if I could get him to change back, I wouldn't have to tell people

about it.” Strack says this emotional component can haunt victims for years. “That trauma of knowing someone you love is willing to take your last breath,” she says. “How do you live with that?”

Rachel Louise Snyder is the author of the books “No Visible Bruises,” “What We’ve Lost Is Nothing” and “Fugitive Denim.” She first contributed to the magazine in 2013.

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