Central Cord Syndrome After a Car Accident in Georgia

A Person May Still Be Able to Walk While the Spinal Cord Is Seriously Injured

A car crash can injure the cervical spinal cord without leaving someone completely paralyzed. In central cord syndrome, the arms and hands are usually affected more than the legs. A person may be able to stand or even walk while struggling to grip a cup, button a shirt, use a phone, or control their fingers. That unusual pattern can make a serious Georgia car accident injury easier to underestimate in the first hours after a wreck.

Central cord syndrome is an incomplete spinal cord injury, meaning some signals still travel through the spinal cord below the injury. It often follows trauma to the neck and is especially associated with forceful extension in people whose cervical spinal canal was already narrowed by arthritis or stenosis. It can also occur in younger people after fractures, dislocations, or traumatic disc injuries.

At Gary Martin Hays & Associates, our Georgia car accident attorneys look closely at the neurologic timeline in serious spinal cases. The important questions aren't limited to whether the CT showed a fracture. We want to know what the person could do before the crash, what changed immediately afterward, whether weakness developed in the hands or arms, what MRI showed, and whether the recovery left permanent limitations.

What Is Central Cord Syndrome?

The American Association of Neurological Surgeons (AANS) describes central cord syndrome as an incomplete traumatic injury to the cervical spinal cord. The characteristic pattern is weakness in the arms more than the legs, often with especially significant loss of hand function.

The National Institute of Neurological Disorders and Stroke likewise identifies central cord syndrome as an incomplete spinal cord injury and notes that symptoms may include impaired fine control of the arms and hands, altered sensation below the injury, bladder dysfunction, and painful sensations such as tingling or burning.

That makes central cord syndrome more specific than simply saying someone has a spinal cord injury. It also isn't the same as a pinched cervical nerve. A nerve-root injury may create pain, numbness, or weakness in a particular arm distribution. Central cord syndrome reflects injury to the spinal cord itself and can affect both upper extremities, the legs, sensation, balance, and bladder function in different combinations.

Why Can a Car Accident Cause Central Cord Syndrome Without Breaking the Neck?

One of the most important features of central cord syndrome is that a dramatic fracture isn't always present. In older adults, the spinal canal may already be narrowed by degenerative changes. If the crash forces the neck backward into hyperextension, the available space around the cord can become even tighter for an instant, squeezing and injuring the spinal cord.

That is why pre-existing cervical spinal stenosis can matter so much in these cases. The stenosis may have been silent before the wreck. A person can have age-related narrowing on imaging without hand weakness, gait problems, or a diagnosis of spinal cord injury.

Central cord syndrome can also occur after higher-energy trauma involving a fracture, dislocation, traumatic disc herniation, ligament injury, or another structural lesion that compresses or damages the cord. Younger patients are more likely to have a major traumatic structural injury than the classic older patient with a narrow canal, but the exact mechanism has to be determined from the individual medical evidence.

Why Central Cord Syndrome Can Be Missed or Minimized After a Crash

The injury doesn't always look the way people expect a spinal cord injury to look. Someone can be conscious, talking, moving the legs, and still have a major cervical cord injury. The table below shows several findings that can create a false sense of reassurance.

Finding after the crash	Why it can be misleading	What still needs to be evaluated
The person can still stand or walk	People often equate spinal cord injury with complete paralysis.	Central cord syndrome is incomplete. Leg function may be much better preserved than arm and hand function.
CT shows no acute fracture	A negative fracture study can sound like the neck is structurally fine.	CT is strongest for bone. MRI may still show cord compression, edema, disc injury, ligament injury, or other soft-tissue
MRI says “degenerative stenosis”	The insurer may treat the condition as entirely age-related.	Doctors still need to determine whether the collision produced new cord dysfunction or made previously silent narrowing symptomatic.
The hands are weak but the legs are stronger	The uneven weakness can look inconsistent to someone unfamiliar with the syndrome.	Disproportionately greater upper-extremity weakness is a defining clinical feature of central cord syndrome.
Strength starts improving in the hospital	Early improvement can be mistaken for a full recovery.	Hand dexterity may recover more slowly, and residual weakness, sensory problems, pain, or bladder issues can remain.

None of these findings proves central cord syndrome by itself. The diagnosis depends on the neurologic examination, imaging, mechanism of injury, and the patient's clinical course.

Hand Weakness Can Be the Most Disabling Part of the Injury

Central cord syndrome can leave someone with enough leg strength to walk but not enough hand control to live independently. That difference matters because walking is only one measure of neurologic recovery.

- **Fine Motor Control:** Buttoning clothes, tying shoes, writing, typing, handling medication, using utensils, and picking up small objects can become slow or impossible.
- **Grip and Strength:** Weakness may interfere with opening containers, carrying groceries, holding tools, transferring safely, or pushing up from a chair.

- **Sensation:** Numbness, tingling, burning, or altered temperature sensation can make the hands unreliable even when some strength returns.
- **Coordination:** A person may technically be able to move the fingers but lack the precision needed for work, hobbies, or self-care.
- **Bladder Function:** Difficulty urinating or loss of bladder control can occur in some central cord injuries and adds another layer to the recovery.

Persistent numbness and tingling after a car accident shouldn't be evaluated only as a peripheral nerve complaint when weakness, balance changes, or bilateral symptoms suggest the spinal cord may be involved.

A Normal-Looking Vehicle Doesn't Rule Out a Serious Cervical Cord Injury

Insurance companies sometimes focus heavily on photographs of the vehicles. If the bumper isn't crushed or the passenger compartment looks intact, they may argue that the crash couldn't have caused a major neurologic injury.

Vehicle damage can help reconstruct a collision, but it isn't a medical test. Occupant position, age, pre-existing spinal anatomy, direction of force, seat geometry, head movement, and other factors all affect what happens to the neck. The fact that vehicle damage doesn't always match injury severity is particularly important when a vulnerable cervical canal is exposed to a sudden hyperextension force.

That doesn't mean every low-damage collision causes central cord syndrome. It means the medical diagnosis shouldn't be accepted or rejected solely from repair estimates or photographs.

MRI and the Neurologic Examination Have to Tell the Same Story

When central cord syndrome is suspected, the neurologic examination is critical. Doctors assess strength in different muscle groups, sensation, reflexes, hand function, walking, coordination, and bladder symptoms. Those findings help define the level and severity of the spinal cord injury.

CT is commonly used after trauma to look for cervical fractures and alignment problems. MRI gives different information. It can show spinal cord compression, disc herniation, ligament injury, hematoma, and abnormal signal within the cord that may represent edema or contusion.

The diagnosis still isn't made by an MRI phrase alone. A narrow canal can exist before a collision. Cord signal changes can vary. The most persuasive medical picture usually comes from matching the imaging to the neurologic deficits and the timing of those deficits.

That timeline becomes even more important when neurologic symptoms develop or become more noticeable after the initial crash evaluation. Swelling and secondary changes around a spinal cord injury can cause the clinical picture to evolve after the moment of impact.

Pre-Existing Arthritis or Stenosis Doesn't End the Causation Analysis

Many central cord syndrome cases involve an older adult whose post-crash imaging shows cervical spondylosis, bone spurs, or stenosis. The insurance argument can then sound simple: the spine was already degenerative, so the crash didn't cause the neurologic problem.

The medical question is more precise. Was the person already experiencing myelopathic symptoms before the collision? Had they been dropping objects, walking unsteadily, losing hand strength, or seeking treatment for spinal cord compression? Or were they functioning independently until a crash produced a sudden new pattern of upper-extremity weakness?

When a collision aggravates a pre-existing spinal condition, Georgia law can still allow recovery for the additional harm caused by the aggravation. The eggshell plaintiff rule also prevents a negligent defendant from avoiding responsibility simply because the injured person was more medically vulnerable than someone with a wider spinal canal.

The claim still has to stay medically accurate. A crash doesn't create years of degenerative stenosis in seconds. The issue is whether trauma caused a new cord injury, triggered symptoms in a previously silent condition, or materially worsened neurologic function that was already compromised.

How Is Central Cord Syndrome Treated?

Treatment depends on the severity of the neurologic deficits, spinal stability, the amount and source of cord compression, age, other injuries, and whether the patient is improving or deteriorating.

Early care may include cervical immobilization, blood-pressure and respiratory management, repeated neurologic examinations, MRI and CT imaging, pain control, and rehabilitation planning. Physical and occupational therapy can become especially important because the hands and arms may lag behind the legs during recovery.

Surgery isn't automatic in every central cord syndrome case. The AANS notes that observed neurologic improvement can support nonsurgical management in selected patients, while significant spinal cord compression, traumatic disc herniation, instability, or neurologic deterioration may lead to surgical decompression or stabilization. Modern neurosurgical guidance emphasizes individualized decisions based on the actual injury and patient rather than one timing rule for everyone.

That variability is important legally too. A patient who doesn't undergo emergency surgery can still have a serious spinal cord injury. Conversely, a recommendation for surgery should be tied to the structural problem, neurologic findings, and treating specialist's reasoning rather than treated as inevitable.

Recovery Often Happens in an Uneven Order

Central cord syndrome can improve substantially, but recovery isn't always complete and it isn't always uniform. The AANS notes that leg function often returns before bladder control and arm function, with hand and finger dexterity tending to improve later.

Age, severity of the initial injury, the amount of cord damage or compression, and early neurologic improvement can all affect the outlook. Younger patients often recover more completely than older patients, but prognosis has to remain individualized.

Someone who regains the ability to walk may still be left with hand weakness, neuropathic pain, altered sensation, fatigue, balance problems, bladder dysfunction, or difficulty performing skilled work. Those residual deficits can make the injury functionally catastrophic even when the person is no longer using a wheelchair.

For people with lasting paralysis or major weakness, paralysis after an auto accident can affect transportation, housing, personal care, work, and nearly every part of daily independence.

Five Types of Evidence Can Clarify What the Crash Changed

A central cord claim becomes much stronger when the evidence separates the person's pre-crash condition from the neurologic changes that followed the wreck.

1. **Pre-Crash Medical and Functional History:** Prior neck imaging, primary-care records, orthopedic or neurology records, and testimony about daily function can show whether stenosis was known and whether it was actually causing hand, gait, or bladder problems before the collision.
2. **Early Neurologic Findings:** Emergency, trauma, neurosurgical, and rehabilitation notes can document the first strength measurements, sensation changes, reflex findings, hand dysfunction, bladder issues, and ability to walk.
3. **Imaging:** CT can identify fractures and alignment abnormalities, while MRI can help identify cord compression, disc injury, ligament damage, hematoma, and spinal cord signal changes.
4. **Collision Evidence:** Photos, video, event data, seat position, witness accounts, and reconstruction evidence may help explain the direction and magnitude of the forces acting on the neck.
5. **Recovery and Functional Testing:** Therapy records, grip testing, occupational-therapy assessments, work restrictions, and later neurologic examinations can show which abilities returned and which deficits persisted.

That type of before-and-after evidence is also what separates a central cord case from a generic claim for long-term spinal injury after a Georgia car accident. The diagnosis matters, but the functional consequences determine what the injury actually costs the person.

Central Cord Syndrome Can Permanently Change a Career

A person doesn't have to be completely paralyzed to lose the ability to perform their previous work. Electricians, mechanics, nurses, surgeons, machinists, warehouse workers, drivers, construction workers, hairstylists, chefs, and anyone whose job depends on grip, dexterity, bilateral hand use, or fast physical coordination can be profoundly affected by residual central cord deficits.

When those limitations are expected to last, the claim may need evidence showing lost earning capacity rather than simply calculating wages missed during hospitalization. A vocational expert can evaluate realistic work options after a serious injury when the worker can no longer perform the physical or fine-motor demands of the prior occupation.

Future Care Has to Account for More Than the Initial Hospitalization

The long-term medical needs after central cord syndrome vary widely. Some patients recover enough to live independently with relatively limited follow-up. Others need ongoing neurology or spine care, physical therapy, occupational therapy, medications for neuropathic pain or spasticity, assistive devices, additional surgery, home modifications, or help with activities of daily living.

When permanent neurologic deficits create substantial future needs, a life care planner can organize projected medical care, equipment, therapy, and support around the treating doctors' prognosis. That kind of planning is particularly useful when hand dysfunction or mobility limitations are expected to continue for years.

The damages analysis can also include pain, altered sensation, loss of independence, lost income, reduced future earning ability, and the effect of permanent neurologic limitations on ordinary daily life. The value of the claim should reflect the functions the person lost, not just whether they eventually learned to walk again.

Our Georgia Car Accident Lawyers Can Build the Neurologic Timeline

Central cord syndrome is easy to misunderstand because the injury can look inconsistent to someone who expects spinal cord trauma to cause equal weakness everywhere. A person may walk into rehabilitation while still being unable to use their hands normally. A CT can show no fracture while MRI and the neurologic examination show a serious cervical cord injury. An old diagnosis of stenosis can coexist with a very new loss of function.

Our attorneys can gather pre-crash records, emergency and rehabilitation records, preserve collision evidence, compare imaging, document hand and work limitations, and work with treating specialists and other experts when the cause or long-term impact is disputed.

If you or someone you love developed disproportionate arm or hand weakness, numbness, balance problems, bladder changes, or another neurologic deficit after a Georgia collision, contact Gary Martin Hays & Associates for a free consultation. We can review what changed after the crash and help determine what evidence may be needed to protect the claim.