

TRANSVERSE MYELITIS

Background

Transverse myelitis (TM) is a neurological disorder caused by inflammation of the spinal cord. It is characterized by signs and symptoms of neurologic dysfunction in motor and sensory tracts on both sides of the spinal cord. The inflammation of the spinal cord interrupts the communication between nerve fibers in the spinal cord and the rest of the body.

Symptoms can begin slowly and progressively worsen over hours or days. Damage depends on the affected area of the spinal cord, but symptoms generally include:

- Weakness in the arms and legs
- Sensory problems such as numbness or tingling
- Bowel and bladder dysfunction
- Pain and discomfort

TM can affect people of any age, gender, or race. The inflammation that leads to TM can be caused by or has been linked to several other conditions including autoimmune disorders (e.g., multiple sclerosis), viral infections (e.g., varicella zoster, herpes simplex, cytomegalovirus, Epstein-Barr), and bacterial infections (e.g., tuberculosis, pertussis, tetanus, Lyme disease, middle ear infections, bacterial pneumonia).

There is no current cure for TM. Treatments aim to alleviate symptoms and reduce spinal cord inflammation. Treatments include intravenous steroids, plasma exchange, antiviral medications, and pain medications. Intensive physical and occupational therapy is often prescribed. Nerve pain management and emotional support are also part of treatment and recovery.

The outcome for TM is broad and recovery ranges from no improvement in symptoms to complete recovery. The student may continue to experience a range of physical issues including bowel and bladder management, maintenance of skin integrity, spasticity, activities of daily living, mobility, and pain.



Top Takeaways for School Considerations

Transverse myelitis (TM) is the inflammation of a part of the spinal cord. The exact cause is often unknown but sometimes may occur in individuals with an autoimmune disease or after an infection.

Understanding the student's present level when returning to school will be important. Children diagnosed with TM could have been previously healthy and may not have a significant medical or educational history.

The student's re-entry planning should consider school staff education and training to meet their unique needs (e.g., mobility, emergency planning).

The student may have physical mobility needs that may require the use of assistive devices or orthotics.

Fine motor skills like handwriting may be difficult for the student because of sensory issues and discomfort. Consider providing class notes and alternate ways of testing.

Students will require support when they return to school due to the changes of their motor functions and the necessary and ongoing therapies for the student to be comfortable.

Considerations for the Individualized Healthcare Plan (IHP)

- Nursing diagnosis of autonomic dysreflexia, risk for disturbed sensory perception, risk for unstable blood pressure, impaired physical mobility, and impaired urinary elimination
- Current diagnosed health condition including date of diagnosis, progress of disease process and other chronic health conditions
- Current medication and treatment orders (consider schedule, equipment needs and side effects)
- Nutrition interventions and equipment needs
- Elimination interventions and equipment needs (consider catheterization brand/system, French size, cleaning procedure and frequency of catheterization); note location of procedure
- Use of specialized equipment, adaptive equipment, and orthotics
- Activity, positioning, transferring (consider precautions and/or restrictions)
- Skin check, pressure relief techniques
- Consider emergency care plan(s) (ECP) and emergency evacuation plan(s) (EEP) as related to medical needs in the school setting, and staff education/training, as appropriate

Discussion Starters for Educational Team

1. Has the school staff been trained to implement the student-specific emergency plan?
2. Would the student benefit from evaluations or assessments in any of the following areas: physical therapy, occupational therapy, speech and language therapy, assistive technology, adapted physical education, functional behavior, psychology, hearing and vision?
3. Would the student benefit from additional academic support and/or modified education? (e.g., copies of notes, extra time, reduced workload, simplified instructions, alternative formats for presentation of material, 504/IEP)?
4. Does the student need support with gross or fine motor skills in the classroom?
5. Is the physical school environment safely accessible for the student's mobility needs? (e.g., entry and exit, ramps, location of classes, access to elevator, doorways)
6. Does the classroom environment support the student's needs and/or equipment (e.g., desk/seating options, maneuverability space, electrical outlets, flash pass for bathroom or nurse)?

Resources

Kennedy Krieger Institute: International Center for Spinal Cord Injury
kennedykrieger.org

Child Neurology Foundation
childneurologyfoundation.org/disorder/transverse-myelitis/

Siegel Rare Autoimmune Association
wearesma.org



Scan QR code or visit **KennedyKrieger.org/Redirect** for more information.