

Transverse Myelitis

Background

Transverse myelitis (TM) is a neurological disorder caused by inflammation of the spinal cord. It is characterized by neurologic dysfunction in motor and sensory tracts as inflammation 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 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

Transverse myelitis (TM) is a neurological condition caused by inflammation of the spinal cord that disrupts communication between the nerves in the spinal cord and the rest of the body.

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.

Considerations for the Individualized Healthcare Plan (IHP)

- Nursing diagnoses: Autonomic dysreflexia, risk for disturbed sensory perception, risk for unstable blood pressure, impaired physical mobility, and impaired urinary elimination
- Nutrition interventions and equipment
- Use of specialized equipment, adaptive equipment, and orthotics
- Activity, positioning, transferring (consider precautions and/or restrictions)
- Skin check, pressure relief techniques
- Consider emergency action plans (EAPs) and emergency evacuation plans (EEPs) related to special health care needs, including staff education/training

Discussion Starters for the Educational Team

1. 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?
2. 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)?
3. Does the student need support with gross or fine motor skills in the classroom?
4. 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)
5. 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)?
6. Will staff receive education/training to implement the student-specific emergency plan?

Resources

Kennedy Krieger Institute: International Center for Spinal Cord Injury
[kennedykrieger.org/patient-care/centers-and-programs/international-center-for-spinal-cord-injury](https://www.kennedykrieger.org/patient-care/centers-and-programs/international-center-for-spinal-cord-injury)

Child Neurology Foundation
[childneurologyfoundation.org/disorder/transverse-myelitis/](https://www.childneurologyfoundation.org/disorder/transverse-myelitis/)

Siegel Rare Autoimmune Association
[wearesrna.org](https://www.wearesrna.org)



For more information, please scan the QR code or visit: [KennedyKrieger.org/SHNIC](https://www.KennedyKrieger.org/SHNIC)

