



CASE STUDY ON FLACCID PARAPLEGIA WITH TRANSVERSE MYELITIS

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ABSTRACT

Flaccid paraplegia is mainly paralysis of two corresponding extremities, and is the antithesis of spastic paraplegia. It may result from different causes. Transverse myelitis is an inflammation of both sides of one section of the spinal cord. This neurological disorder often damages the insulating material covering nerve cell fibers (myelin). The exact reason for transverse myelitis is not known. Sometimes there is no known cause. A female patient was admitted to tertiary care hospital with complaints of weakness of lower leg, immobility of legs, unable to sit or stand, pain over spine. Bladder incontinence, decreased appetite associated with cold and cough and was diagnosed with flaccid paraplegia with transverse myelitis and this patient was cured with proper treatment which avoided further complications.

Key Words:- Myelitis, Case study, Clinical approach, Paraplegia.

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toxins, such as lead and alcohol; unknown etiology (Nandasiri S et al., 2012), such as Landry's disease, and congenital defects, such as a bio trophy and intrauterine paralyses (Carod-Artal FJ, 2008).

The symptoms of flaccid paraplegia are mainly paralysis; loss of reflexes; flaccidity; atrophy; vasomotor disturbances, and sensory disturbances (Dubey D et al., 2019). Transverse myelitis is an inflammation of both sides of one section of the spinal cord (Seet RCS et al., 2006). This neurological disorder often damages the insulating material covering nerve cell fibers (myelin). Transverse myelitis interrupts the messages that the spinal cord nerves send throughout the body. This can cause pain, muscle weakness, paralysis, sensory problems, or bladder and bowel dysfunction (Jha, S., & Kumar, R, 2006).

Typical signs and symptoms include (Kincaid, O., & Lipton, H. L, 2006):

- Pain. Transverse myelitis pain may begin suddenly in your lower back. Sharp pain may shoot down your legs or arms or around your chest or abdomen. Pain symptoms vary based on the part of your spinal cord that's affected.

Signs and symptoms of transverse myelitis usually develop over a few hours to a few days and may

INTRODUCTION

Flaccid paraplegia is mainly paralysis of two corresponding extremities, and is the antithesis of spastic paraplegia (Carod-Artal FJ, 2010). It may result from different causes, of which the most common are (Saison J et al., 2015): section of the cord from direct trauma, such as bullet and stab wounds; compression as a result of fracture, dislocation, spondylithiasis, extra medullary neoplasm or hemorrhage; infections, such as tuberculosis, syphilis, poliomyelitis, malaria, , accompanying diseases of the hematopoietic system and thrombosis; exogenous

sometimes progress gradually over several weeks (Yiu, E. M et al., 2009).

Transverse myelitis usually affects both sides of the body below the affected area of the spinal cord, but sometimes there are symptoms on just one side of the body.

- Abnormal sensations. Some people with transverse myelitis report sensations of numbness, tingling, coldness or burning. Some are especially sensitive to the light touch of clothing or to extreme heat or cold. You may feel as if something is tightly wrapping the skin of your chest, abdomen or legs.
- Weakness in your arms or legs. Some people notice heaviness in the legs, or that they're stumbling or dragging one foot. Others may develop severe weakness or even total paralysis.
- Bladder and bowel problems. This may include needing to urinate more frequently, urinary incontinence, difficulty urinating and constipation (Helfferich, J, 2019).

The exact reason for transverse myelitis is not known. Sometimes there is no known cause.

- Viral, bacterial and fungal infections affecting the spinal cord may cause transverse myelitis. In most cases, the inflammatory disorder appears after recovery from the infection.

Bacterial skin infections, gastroenteritis and certain types of bacterial pneumonia also may cause transverse myelitis.

- Rarely, parasites and fungal infections may infect the spinal cord.

People with transverse myelitis usually experience only one episode. However, complications often linger, including the following:

Stiffness, tightness or painful spasms in your muscles (muscle spasticity). This is most common in the buttocks and legs.

Partial or total paralysis of your arms, legs or both. This may persist after the first symptoms.

Sexual dysfunction, a common complication of transverse myelitis. Men may experience difficulty achieving an erection or reaching orgasm. Women may have difficulty reaching orgasm (Chanthamat, N., & Sathirapanya, P, 2019; Hopkins, S. E, 2017).

CASE PRESENTATION

A 60 year old female patient weighing 56 kg from semirural area was admitted to tertiary care hospital with complaints of weakness of lower leg, immobility of legs, unable to sit or stand, pain over spine. Bladder incontinence, decreased appetite associated with cold and cough. On physical examination it was found that RS – wheeze (+), CVS: S1, S2 (+), GIT – soft without tenderness.

O/E patient is semiconscious, vitals are stable. Lab investigations are revealed decreased haemoglobin levels

VITALS:

VITALS & Lab Investigations	Day 1
BP(mmHg)	150/100
RR	21
PULSE	78
TEMP(F)	98.6
Hb	9.8 g%
PCV	28.2 %
WBC Count	8940 cells/cu.mm
Polymorphs	68 %
Lymphocytes	27 %
Eosinophils	03 %
Platelet count	3.1 lakhs/cu.mm
BUN	19 mg/dl
Serum. Creatinine	0.84 mg/dl
Pus cells	2-8 cells
Epithelial cells	4-8 cells

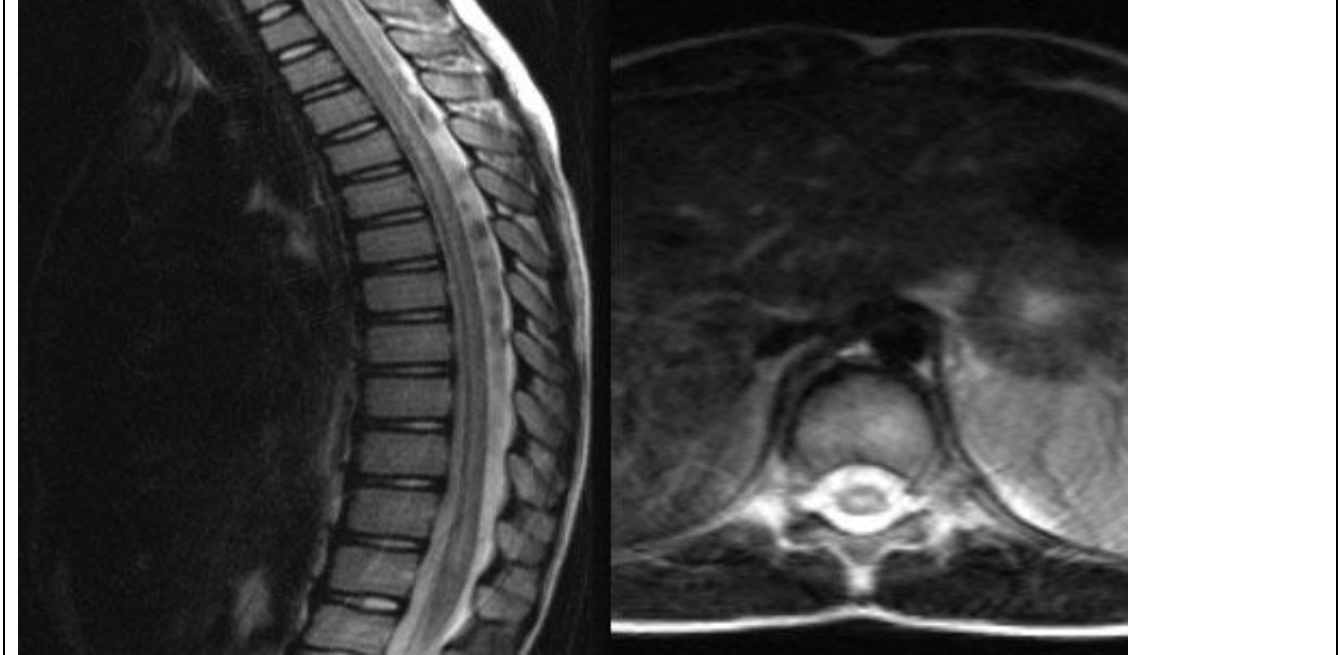
By signs and symptoms such as weakness and immobility of lower limbs. Unable to sit or stand associated with pain over spine, the case is diagnosed to be 'FLACCID PARAPLEGIA WITH TRANSVERSE MYELITIS'.

TREATMENT:

Brand name	Generic name	Dose
Inj. Xone	Ceftriaxone	1g
Inj. Pan	pantoprazole	40 mg

Neb. Duolin	Salbutamol+ Ipratropium	5 mg
Inj.Decadran	Dexamethasone	8 mg
T. Amlong	Amlodipine	5 mg
	IVF- DNS	1 pint

Fig. 1. Ultrasonography Report



DISCUSSION

There are many different causes of transverse myelitis, including infections and immune system disorders that attack the body's tissues. It could also be caused by other myelin disorders, such as multiple sclerosis. Other conditions, such as a stroke of the spinal cord, are often confused with transverse myelitis, and these conditions require different treatment approaches.

Treatment for transverse myelitis includes medications and rehabilitative therapy. Most people with transverse myelitis recover at least partially. Those with severe attacks sometimes are left with major disabilities. In this case patient had most of the symptoms related to transverse myelitis leading to FLACCID PARAPLEGIA WITH TRANSVERSE MYELITIS. After physical examination and many laboratory examinations, & ultrasonography patient was diagnosed the patient with flaccid paraplegia with transverse myelitis. Blood pressure of the patient was found to be slightly high. Ceftriaxone was given to treat infection. IVF for supplementation, Amlodipine to treat hypertension, Salbutamol to treat dyspnea, Dexamethasone for paraplegia & Pantoprazole for GI prophylaxis.

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Clinical pharmacist intervention

Drug-Drug Interaction: Dexamethasone + amlodipine – lowers blood pressure – monitor BP regularly.

Medication Errors: No significant medication errors found.

Critical Analysis: As per American Association of Neurology guidelines antibiotics with steroids should be prescribed for paraplegia with transverse myelitis.

CONCLUSION

The study shows that certain medications prescribed will help to reduce the infections, paraplegia & dyspnea mainly. After 4 days of hospitalization patient condition was found to be stable and patient was discharged and medications were prescribed along with counselling. Depression or anxiety, which is common in those with long-term complications because of the significant changes in lifestyle, the stress of chronic pain or disability, and the impact of sexual dysfunction on relationships and can be cured with proper treatment and thus in this condition timely given treatment avoided further complications.

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