

A rare case of transverse myelitis associated with pregnancy

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Abstract

Transverse Myelitis is a rare but well recognized neurological manifestation in pregnancy. We describe a patient G3P1L1A1 who developed an acute spinal cord lesion presenting to our OPD with bilateral lower limb weakness and cramps at 28 weeks of pregnancy preceded by fever of two days. MRI was the diagnostic tool.

Keyword- Transverse Myelitis, spinal cord, pregnancy

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CASE REPORT

A 23 years old G3P1L1A1 with 28 weeks gestation age came to our OPD on wheel chair, she was unable to walk with lower limb weakness and cramps which was preceded by fever of two days. On examination vitals were stable. On per abdomen examination, uterine height was corresponding with the gestational age with relaxed abdomen. On per vaginal examination os was closed. On CVS examination, peripheral pulsations were present. On CNS examination, bilateral hypotonia (flaccid limbs) was there. Reflexes were delayed. Bilateral motor power was 0/5 in lower limbs. She then developed urinary hesitancy.

Investigations were as follows: Haemogram was suggestive of Anemia with Hb-8.9 with normal kidney function tests and electrolytes. RA factor was negative(8.4). ANA was negative(0.51). ESR was normal with Quantitative increase in CRP(1.6) Dengue and WIDAL were negative. Differential diagnosis were Guillain Barre Syndrome and Acute transverse myelitis.

MRI of dorsolumbar spine with axial cut showed involvement of D3 to D7 segments with Acute Transverse Myelitis. MRI of lumbosacral spine with screening of whole spine suggested sacroilitis of inflamed/infective etiology with sacralisation of L5 vertebra. Haemangioma was seen in D6 vertebra.

Patient simultaneously developed Intra uterine fetal demise of 28 week, hence labour was induced. Anaemia correction was done with 2 units packed cell supply. Patient delivered vaginally with no intrapartum complications. She was on injectable solumedrol (methyl prednisolone sodium succinate) 1gm for 5 days then orally replaced with tab omnacort 40mg OD postdelivery. Injectable heparin 0.5cc sc for 5 days was also given. Nerve stimulation studies were done as patient had power 0/5 during her hospital stay. Neurophysiotherapy was also started.

Patient recovered gradually with improved bladder functions and power of 3/5 on discharge.

DISCUSSION

Transverse Myelitis is a neurological condition that happens when both sides of the same section of the spinal cord become inflamed. These inflammation can damage the myelin. Loss of myelin often leads to spinal cord scarring that blocks nerve impulses and results in physical problems.

An important issue for the individual to consider is whether there is any sign of autoimmune disease such as SLE, as pregnancy can affect disease activity in such illnesses. It is difficult to assess how a monophasic illness

such as typical acute transverse myelitis could affect a woman during pregnancy and delivery. Major complications encountered are urinary tract infections and mobility problems.

Most woman with paraparesis can deliver vaginally. The woman with complete cord transection above T10 segments will have painless labor. However often transverse myelitis is incomplete or recover partially, so this is not reliable for patients with only partial sensory loss below T10.

The possible complications of transverse myelitis during pregnancy could be DVT, constipation, anaemia, preterm labor and urinary tract infections. Pregnancy increases clotting potential the risk of developing DVT. Frequent or chronic urinary tract infections can be a common problem in transverse myelitis who experience bladder dysfunction.

Pregnancy has a high potential to exacerbate this problem. Women with transverse myelitis generally should not be at a higher risk for occurrence of preterm labor, however they are at higher risk for being unable to detect the signs and symptoms of preterm labor. This risk is dependent on the level of sensory function present. The ability to perceive contractions is related to the location of spinal cord lesion. Lesions below T11 level will permit sensations of uterine contractions and pain. Lesions at T6-T10 may allow contractions to be perceivable but not painful. A Lesion at T6 or above will inhibit the woman's ability to perceive contractions. If altered sensory perception exists it may not be possible to feel the contractions, cramping sensation and backache associated with preterm labor.

CONCLUSION

Transverse myelitis is a medical disease but in rare context of pregnancy, scope of obstetric care increases

and dynamics change if it remains untreated or undiagnosed and may lead to complications as DVT, urinary tract infections, preterm labour. There are definitely risks involved, but these can be managed. Pregnancy will definitely increase the number of physician's involved in woman's care. This will require an additional component of co-ordination of women and her family. Careful evaluation by obstetrician and neurologist can help identify potential challenges and how best to manage them.

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