What is Acute Transverse Myelitis (ATM)?

Acute transverse myelitis is an attack of inflammation (swelling) of the spinal cord. It is caused by the body’s immune system becoming mis-programmed and activating immune cells to attack the healthy myelin covering the nerves in the spine.

What causes ATM?

We do not know exactly why this happens, sometimes it can follow on from a viral infection, but sometimes it can also just occur with no prior warning or precipitating event.

What are the signs and symptoms of ATM?

The symptoms of ATM can come on quickly and depend on where in the spine the swelling occurs. If the swelling is in the lower back, then symptoms can include back pain, weakness of both legs and bowel and bladder problems. If the attack is higher such as around the neck (cervical) area, then both arm and leg weakness can occur, and in severe cases breathing can be affected.

How is ATM treated?

Steroid treatment can reduce some symptoms and stop new symptoms from developing. Once the diagnosis is made, steroids are usually given into a vein once a day for the next three to five days. If there is no sign of improvement within a few days, other treatments may need to be considered. Intravenous immunoglobulin can be given, as can a treatment known as plasma exchange. This would be discussed in full detail if needed. At present we do not know the best way to treat ATM, and you may be asked to help us in researching this.

What is the prognosis of ATM?

The long-term prognosis for children with ATM varies, and some children do make a very good recovery. A number of children though are left with some motor weakness and/or with residual problems such as weakness in bowel and bladder function. ATM will not affect your child’s thinking.
Will my child get ATM again?
ATM usually only occurs once. Rarely, some children have an underlying cause for the ATM, and this would increase their chance of further attacks. Your doctors will do specific tests including blood tests, an MRI brain scan and possibly an eye test to look for further evidence of these conditions.

What happens next?
Once the team looking after your child feels that the time is right, you will be discharged either to your local hospital or to a centre specialising in spinal rehabilitation, depending on your child’s recovery. Follow up will be arranged as needed by the specific members of the multi-disciplinary team.

Further information and support
There are several organisations in the UK offering support and advice about ATM and life afterwards.

- The MS Society supports people affected by multiple sclerosis and other demyelinating disorders. Call their helpline on 0808 800 8000 or visit their website at www.mssociety.org.uk and www.youngms.org.uk
- The Transverse Myelitis Society may also be able to help. Their helpline number is 020 8568 0350 and their website is at www.myelitis.org.uk
- The British Brain and Spine Foundation helpline is run by neurological nurses. Call them on 0808 808 1000 or visit their website at www.brainandspine.org.uk
- The British Trust for the Myelin Project supports researchers and other people with an interest in demyelinating disorders. You can call them on 0161 292 3191 or visit their website at www.myelinproject.co.uk

Compiled by the Neuroimmunology Centre in collaboration with the Child and Family Information Group
Great Ormond Street Hospital for Children NHS Foundation Trust, Great Ormond Street, London WC1N 3JH
www.gosh.nhs.uk