# Myasthenia



### What is Myasthenia?

- Myasthenia is a condition affecting the connection between the nerves and muscles in your body. It occurs commonly due to an overactive immune system producing an abnormal antibody, which interferes with transmission of the electrical signal between the nerve and the muscle.
- It can cause weakness of the muscles controlling the eyes and eyelid movement, the muscles in the arms, legs and neck, and occasionally, the muscles involved in breathing.
- Weakness generally gets worse towards the end of the day and with prolonged activity.
- Myasthenia is a chronic condition and requires long term treatment.
- Some patients can develop a sudden deterioration, with breathing and swallowing difficulties, which can be life threatening.

## Therapies

- There are two groups of medications that are used in the treatment of myasthenia one to control symptoms and the other to control the disease.
- The medications used to control symptoms act by increasing the signal transmission between the nerve and the muscle.
- The medications that control the disease are immunosuppressant medications which can be given by mouth or as an injection, and act over a longer period to dampen the overactive immune system.
- Your doctor will decide on the ideal combination of medications to manage your condition. It is very important not to stop or adjust doses without medical opinion and continue the prescribed medication as advised throughout life.
- Immunosuppressant medication use may increase the risk of infection. Therefore, it is important to take precautions to avoid getting infections while on such medications.
- It is advisable to keep a buffer stock of your medication, as sudden stoppage of medications due to non-availability can occasionally lead to life-threatening complications.
- Some patients with myasthenia may have a thymoma (growth in the chest). Your doctor may ask for a chest scan to screen for this.



#### **Avoiding flares**

- Myasthenia can be exacerbated by several factors, such as intercurrent infections, stress from trauma or surgery, certain types of antibiotics and specific heart/blood pressure medications, etc.
- It is very important that you inform any doctor or healthcare worker you see, that you have myasthenia and tell them what medication you are on, so that they can avoid giving you medications that might worsen myasthenia.

#### How can you tell if you are developing a Myasthenic flare or crisis?

- You should consult your doctor **EARLY** if you develop worsening of your myasthenia symptoms. This may include increased -:
  - weakness and fatigue of your arms and legs
  - slurring of speech
  - difficulty chewing or swallowing
  - difficulty holding your head up due to neck weakness
- You should obtain IMMEDIATE medical help if you develop the following -:
  - Breathing difficulty
  - Feeling short of breath while lying flat in bed
  - Taking rapid, but shallow breaths or having to stop in the middle of a sentence to take a breath
  - Weak cough
  - Swallowing difficulty and poor clearance of secretions
  - Inability to count out loud beyond 20 in a single breath of air

#### **Pregnancy and Myasthenia**

- It is important for female patients to plan their pregnancy and discuss the options with their doctor well in advance.
- Your medications and treatment plan need to be adjusted to ensure the best outcomes for you and your baby.
- Many patients can continue most medications and have good control of their myasthenia during pregnancy. But some medications need to be avoided.
- Discuss plans for labour and delivery in the hospital setting, with your Obstetrician and Neurologist.