

### ***Выводы***

Таким образом, у пациентов с острыми нарушениями мозгового кровообращения в большинстве случаев имеются различные нарушения функции тазовых органов. Нарушения мочеиспускания встречаются в 77 % случаев, нарушения дефекации у 96,1 % пациентов, а проблемы с сексуальной функцией возникали в 100 % случаев. Выявленные изменения нуждаются коррекции и внимания со стороны медицинских работников и ухаживающих лиц.

### **СПИСОК ИСПОЛЬЗОВАННОЙ ЛИТЕРАТУРЫ**

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### **MYASTHENIA GRAVIS IN INDIA**

#### ***Introduction***

Myasthenia gravis is a potentially serious but treatable autoimmune disease which cause disturbance in neuromuscular junction, which results from formation of antibodies that block or destroy nicotinic acetylcholine receptors (AChR) or muscle specific tyrosine kinase at junction between nerve and muscle. This prevents the nerve impulses from triggering muscle contractions. Resulting pathological weakness and rapid fatigue of skeletal muscles, especially effects those that control the eyes, mouth, throat and limbs. About 10 % of patients with myasthenia gravis have thymoma, Usually thymomas aren't cancerous (malignant), but they can become cancerous. Researchers believe that the thymus gland triggers or maintains the production of the antibodies that block acetylcholine. Rarely, mothers with myasthenia gravis have children who are born with myasthenia gravis (neonatal myasthenia gravis). If treated promptly, children generally recover within two months after birth. Some children are born with a rare, hereditary form of myasthenia gravis, called congenital myasthenic syndrome. And most cases are however idiopathic. Muscle weakness caused by myasthenia gravis worsens as the affected muscle is used. Because symptoms usually improve with rest, muscle weakness can come and go. Half of the people with MG their first signs and symptoms involve eye problems, such as Drooping of one or both eyelids (ptosis), Double vision (diplopia). According to recent studies prevalence of disease is 2.1–5.0 cases in 1million population per year. It occurs more commonly in women under 40 years and men over 60 years.

#### ***Goal***

To study the clinical presentation, age at onset, gender distribution, serological status and thymic pathology in patients with myasthenia gravis.

#### ***Material and methods of research***

A retrospective study was carried out using records of patients with mayasthenia gravis from the years 1965 to 2008 collected over a period of 43 years from the Neurology Department in a tertiary referral center in India. All the patients included in the study were cases of myasthenia diagnosed on clinical basis and response to cholinesterase inhibitors (edrophonium

or neostigmine). Chest X-ray was done in all patients. Electrophysiology, serology, Computed Tomography (CT)/Magnetic Resonance Imaging (MRI) of chest were done when these became available. The data was analyzed retrospectively with respect to gender, age at onset, Myasthenia Gravis Foundation of America (MGFA) classification and results of investigations including serology, electrophysiology, and histopathology of thymectomy specimens.

**The results of the research and their discussion**

Of 841 patients, 836 (611 males and 225 females) had acquired myasthenia (myasthenia gravis) and five congenital myasthenia. The median age at onset was 48 years (males 53 years and females 34 years). The peak age at onset for males was in the sixth and seventh decade and in females, in the third decade. Two hundred and twenty-two (26.31 %) patients had ocular and 616 (73.68 %) generalized myasthenia shown in figure 1. Serological studies were done in 281 patients with myasthenia gravis for Acetylcholine receptor (AchR) antibodies of which 238 (84.70 %) were seropositive. The most common histopathology was thymoma and the second most common was thymic hyperplasia shown in figure 2.

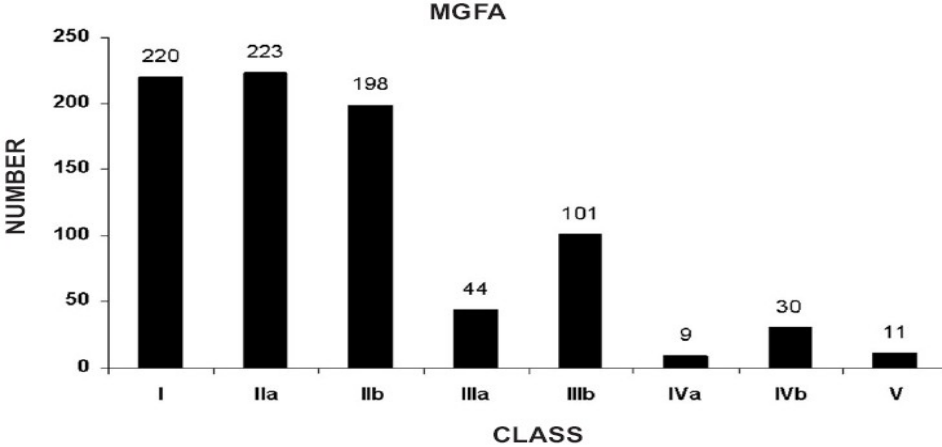


Figure 1 – The distribution at presentation according to MGFA classification.

MGFA Grade 1: ocular MG, MGFA Grade IIa: mild generalized MG, predominant limb or axial muscles involvement MGFA Grade IIb: mild generalized MG, predominant bulbar or respiratory muscles involvement, MGFA Grade IIIa: moderate generalized MG, predominant limb or axial muscles involvement, MGFA Grade IIIb: moderate generalized MG, predominant bulbar or respiratory muscles involvement, MGFA Grade IVa: severe generalized MG, predominant limb or axial muscles involvement, MGFA Grade IVb: severe generalized MG, predominant bulbar or respiratory muscles involvement, MGFA Grade V: MG cases requiring intubation

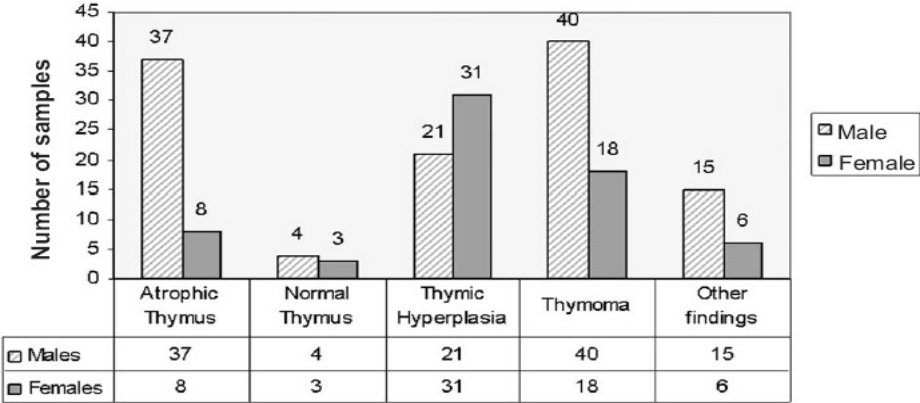


Figure 2 – The major histopathology findings with respect to gender

## **Conclusion**

Myasthenia gravis in our study was more common in males (M:F of 2.70:1). There was a single peak of age at onset (males sixth to seventh decade; females third decade). The higher prevalence of thymomas in this series is in all probability related to selection bias as patients with thymic enlargement or more severe disease underwent thymectomy. Thymoma was more common in males; hyperplasia in females.

## **LITERATURE**

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## **BROCA'S APHASIA AND MOTOR STIMULATION THROUGH SIGN LANGUAGE TRAINING**

### **Introduction**

Broca's aphasia [BA] is an expressive speech disorder, defined by the partial loss of the ability to speak but still maintaining comprehension when spoken to. Essentially, the person is unable to execute the motor/movement part of speaking.

Often caused by:

- Stroke.
- Tumors.
- Injury.
- Infection or Inflammation if the brain etc.

The main function of the Broca's area is to take in stimulus during conversation, or other areas that require speech, formulate a plan on how and what to respond, and transfer this information to the motor cortex, resulting in the action of speech. The Broca's area is active during the planning and processing phase of speech. However, its activity declines during actual speech [1].

When children were under observation for developmental skills in speech and motor function, it was found that improvements in speech was typically achieved after a significant degree of motor function was accomplished [2]. This indicates that, with proper motor stimulation and exercise of the motor cortex, the overall activity of the phono-articulatory muscles will progress.

Briefly, the issue lies in the overall output of the motor cortex regarding speech.

In theory, if we are able to stimulate the motor cortex to make it more efficient and competent in receiving information from the Broca's area and producing speech, it would evidently help in a faster improvement in the speaking process. i.e., we can use motor exercises to increase neuroplasticity.