



## Guest Editorial

# MOLUMA'S Brain Implantology: An Innovation in neuroscience changing and saving lives

Mayukh Pandit<sup>1,\*</sup>

<sup>1</sup>Dept. of Anatomy(Research), T.I.D.S.H.R.C, Bilaspur, Chattisgarh, India



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## 1. Background

General form of neurovascular compression syndrome could be defined as a vascular compression disorder where there is usually a compression of cranial nerves due to aberrant vascular structures. There are several forms of neurovascular compression syndromes known. Out of which most prominent clinical ones are Trigeminal neuralgia, Glossopharyngeal neuralgia, Geniculate neuralgia and Hemifacial spasm. All of this chronic condition arises from a compression caused by a vascular structure to the cranial nerve. My first research focus was on a severe form of neurovascular compression syndromes clinically known as Trigeminal Neuralgia (T.N). Trigeminal neuralgia is a paroxysmal attack of pain lasting from few hours to several days and confined to distribution of one or more divisions of trigeminal nerve. I worked and researched on this disease for a year. I observed the patients of Trigeminal Neuralgia for a long time, recorded and published my case study in journals of medical psychiatry.

There are various medications which are available for Trigeminal Neuralgia such as Carbamazepine, Baclofen, Gabapentin and Phenytoin. Out of which Carbamazepine is considered as the drug of choice. This drug relieves pain for short period of time but could not cure this condition permanently. The possible cure for any neurovascular

compression syndrome must be aimed at pain relief on permanent basis. There are seven surgical procedures known which have passed their clinical trials and known to be the possible cure for Trigeminal Neuralgia. Microvascular Decompression Surgery have achieved the best pain relief period as compared to other surgical procedures known. Dr. Peter Janetta proposed this surgical procedure also known by the name Janetta's Surgical Procedure which was able to cure several neurovascular compression syndromes for much longer period of time. Dr. Peter Janetta introduce the application of Teflon Sponge in MVD. This shredded piece of Teflon was placed between the offending vascular structure and cranial nerve so that a proper separation is ensured. Craniotomy was the surgical approach in MVD to get a proper exposure of cranial nerve as well as the vascular structure which is pressing the nerve. MVD was less invasive surgery for curing neurovascular compression syndromes for longer period of time but not on permanent basis. According to an research conducted by Dr. Aqueel Pabaney reported in Neurosurgical Atlas which showed that MVD could cure TN for a period of 10-20 years , then recurrence of symptoms were observed. There were often some general complications which were reported widely related to MVD was neural damage which further included dysphagia, CSF leakage, facial paralysis, double vision and very often hearing loss. There were sometimes very serious complications observed across world wide which were intracerebellar hematoma, acute hydrocephalus,

\* Corresponding author.

E-mail address: [mayukhpandit17@gmail.com](mailto:mayukhpandit17@gmail.com) (M. Pandit).

cerebellar subdural hematoma, status epilepticus, infection of brainstem, subarchnoid hemorrhage due to traumatic aneurysm and infarction in territory of posterior cerebellar artery. The conventional implant Teflon which was used in MVD to separate the offensation showed various major complications out of which the most prominent clinical condition is known by the name as Teflon Granuloma. Teflon Granuloma is an inflammatory giant cell foreign body reaction to polytetrafluoroethylene fibres. Teflon Granuloma clinically, pathologically and radiographically could emulate malignancy.

## 2. Innovation

From my observation and perspective, Microvascular Decompression surgery is such a surgical procedure which have serious and major complications itself and could not cure any neurovascular compression syndrome permanently without any recurrence. This demanded a better alternation which could cure severe forms of neurovascular compression syndromes permanently without any recurrence and minimal complications.

Working hard on such complicated disorders for years, I developed a surgical procedure which could cure any form of neurovascular compression syndromes. I also have invented and designed a surgical implant named MOLUMA'S Surgical Implant which is designed on the basis of better advancement of technology, starting from having a biocompatible body to utilizing the property of magnetism ensuring proper interlocking and protection of surrounding anatomical structures.

MOLUMA'S Surgical Implant could be classified into underfollowings:-

### 2.1. Moluma's Brain Implantology

1. Type A surgical permanent implant
2. Type B surgical permanent implant
3. Type C surgical removable implant
4. Type D modified implant
5. Type D- advanced implant

- Type A and B would be permanent surgical implant will be used for treating Glossopharyngeal neuralgia, Geniculate neuralgia, Trigeminal neuralgia and Hemi-facial spasm and cure this disorder permanently with minimal complications.
- Type C Removable Implant would be an experimental approach in curing severe form of incurable

neurological disorder without its actual permanent placement which would avoid any form of possible complications.

- Type D modified Implant and Type D advanced Implant are undergoing research work which is not employed for any disorder but a purpose to work on the human intellect.

Any object when implanted in the body could bring many possible infections by the invasion of microorganism. MOLUMA'S Surgical Implant hence would be an "Antibiotic Impregnated Implant" which would prevent any form of invasion of microbes and hence would protect out body from possible infections. MOLUMA'S Surgical Implant would have to be placed by my designed surgical procedure would be known by the name as MOLUMA'S Surgical Procedure. MOLUMA'S Surgical procedure is designed on the basis of 'robotic micro-surgery' with a surgical approach of craniotomy. There could be very minimal complication if arises at all could be seizures, facial numbness or brain swelling. My work and invention of surgical implant at initial stage could cure any form of neurovascular compression syndromes but I believe with its more advancement and body modification could cure many other general incurable disease. MOLUMA'S Surgical procedure would be an innovation in the field of neurosurgery which could cure any form of neurovascular compression syndromes on permanent basis of pain relief.

I believe my creation would change the lives of patient who were suffering from such chronic painful episodes of their life and MOLUMA'S Brain Implantology would bring hope to humanity by saving lives of millions.

## 3. Source of Funding

None.

## 4. Conflict of Interest

None.

## Author biography

**Mayukh Pandit** UG Researcher (Member of American College of Physicians)

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