

International Research Highlights How Multidisciplinary Care Is Transforming Pituitary Adenoma Treatment

USA-Trained Neurosurgeon Dr. Rao Translates Global Research into Practical Guidance, Explaining Why Personalized Care Is Improving Outcomes of Pituitary Tumors

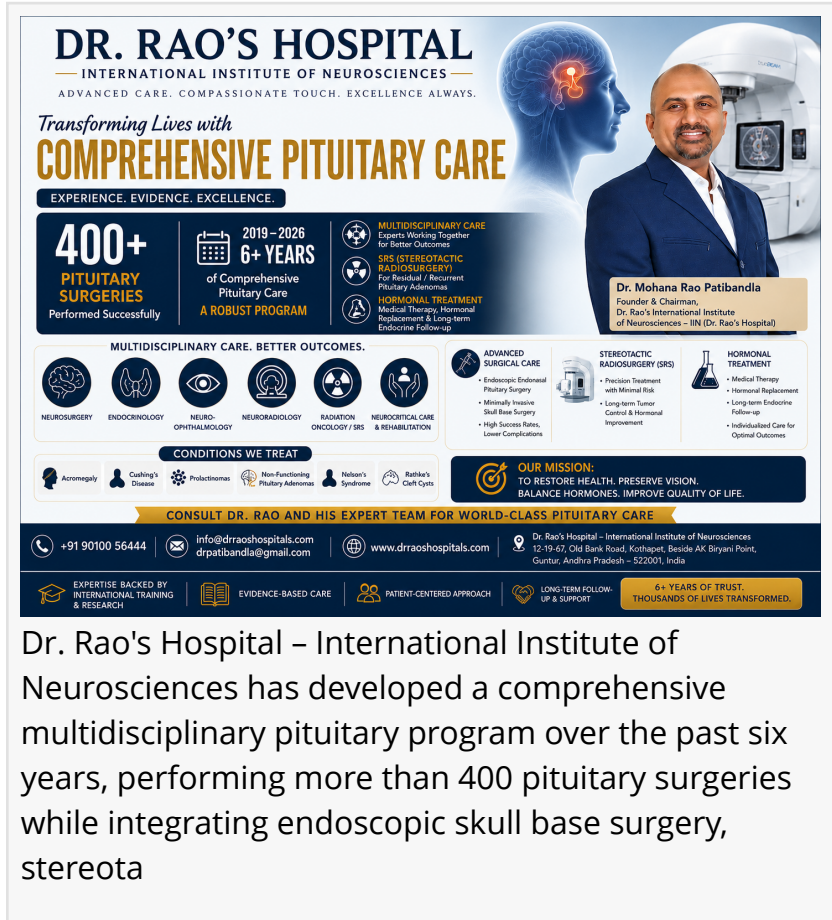
GUNTUR, ANDHRA PRADESH, INDIA, July 28, 2026 /EINPresswire.com/ -- International Research Highlights How Multidisciplinary Care Is Transforming [Pituitary Adenoma](#) Treatment

A diagnosis of a pituitary adenoma can be overwhelming. Patients often worry about brain surgery, vision loss, hormonal disorders, fertility, and whether the tumor is cancerous. For many families, the first question is simple:

"Do I need brain surgery?"

According to Dr. Mohana Rao Patibandla (Dr. Rao), Founder and Chief Neurosurgeon of Dr. Rao's Hospital – International Institute of Neurosciences, the answer is increasingly "not always."

Drawing upon advanced fellowship training in the United States in stereotactic radiosurgery, minimally invasive neurosurgery, skull base surgery, [neuro-oncology](#), pediatric neurosurgery, and cerebrovascular neurosurgery, together with internationally published research on pituitary



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HORMONAL TREATMENT
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Dr. Mohana Rao Patibandla
Founder & Chairman,
Dr. Rao's International Institute of Neurosciences – IIN (Dr. Rao's Hospital)

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Dr. Rao's Hospital – International Institute of Neurosciences has developed a comprehensive multidisciplinary pituitary program over the past six years, performing more than 400 pituitary surgeries while integrating endoscopic skull base surgery, stereota

disorders, Dr. Rao believes that one of the greatest advances in modern neuroscience is not simply better technology—it is better clinical decision-making based on evidence and multidisciplinary collaboration.

"Every pituitary adenoma is unique. The goal is not simply to remove a tumor but to restore health, preserve vision, normalize hormonal function whenever possible, and improve quality of life. Precision medicine begins by understanding the patient, not just the MRI scan."

— Dr. Mohana Rao Patibandla (Dr. Rao)



The advanced biplane cath lab at Dr. Rao's Hospital, designed for precision neurovascular procedures and minimally invasive surgeries, first in Andhra Pradesh and Telangana in India.

“

Every pituitary adenoma is unique. The best treatment is the one guided by evidence, multidisciplinary expertise, and the patient's needs”

*Dr. Mohana Rao Patibandla,
Neurosurgeon & Founder, Dr.
Rao's Hospital*

WHO Is Affected by Pituitary Adenomas?

Pituitary adenomas are among the most common benign tumors of the brain. They can affect men and women of all ages, although they are most frequently diagnosed in adults between 30 and 60 years of age.

Because the pituitary gland regulates hormones that influence nearly every organ system, these tumors can affect far more than the brain alone. Patients may experience problems involving growth, metabolism,

thyroid function, adrenal function, fertility, menstrual cycles, sexual health, bone strength, and overall well-being.

Many patients first seek medical attention for symptoms that seem unrelated to the brain, often consulting endocrinologists, ophthalmologists, gynecologists, or primary care physicians before the diagnosis becomes clear.

WHAT Is a Pituitary Adenoma?

The pituitary gland is often called the "master gland" because it produces hormones that regulate many essential body functions.

A pituitary adenoma is usually a benign (non-cancerous) growth arising from this gland. Although these tumors rarely spread elsewhere in the body, they can significantly affect health by:

- Producing excessive hormones
- Reducing normal hormone production
- Compressing the optic nerves and causing visual loss
- Causing headaches
- Affecting fertility and reproductive health
- Influencing metabolism and body composition

Some pituitary adenomas are functioning tumors, meaning they produce excessive hormones such as growth hormone, prolactin, or ACTH. Others are non-functioning adenomas, which cause symptoms mainly because of their size and pressure on nearby structures.

Understanding the type of pituitary adenoma is one of the most important steps in selecting the appropriate treatment.



The high-tech neurosurgery operating room at Dr. Rao's Hospital, Guntur featuring advanced imaging and navigation systems for precise brain and spine surgeries.



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WHEN Should Patients Seek Medical Evaluation?

One of the challenges in pituitary disease is that symptoms often develop gradually.

Patients should seek specialist evaluation if they experience:

- Persistent headaches
- Progressive loss of peripheral vision
- Double vision
- Unexplained hormonal abnormalities
- Irregular menstrual cycles
- Infertility
- Erectile dysfunction
- Enlargement of the hands, feet, or facial features
- Unexplained weight gain
- Easy bruising
- Persistent fatigue
- Excessive thirst or urination
- Milk discharge unrelated to pregnancy

Early diagnosis often allows treatment before permanent visual or hormonal damage occurs.

WHERE Should Pituitary Tumors Be Treated?

Pituitary adenomas are complex disorders that frequently require expertise from multiple medical specialties.

Rather than being managed by a single physician, many patients benefit from evaluation at a comprehensive neuroscience center where specialists collaborate to develop an individualized treatment strategy.



At Dr. Rao's Hospital – International Institute of Neurosciences, patients with pituitary disorders undergo comprehensive assessment involving neurosurgery, endocrinology, neuro-ophthalmology, advanced neuroimaging, pathology, anesthesiology, rehabilitation, and long-term follow-up.

This collaborative model reflects internationally accepted best practices for managing pituitary diseases.

WHY Has Pituitary Treatment Changed So Dramatically?

For many years, pituitary adenomas were viewed primarily as surgical diseases.

Today, scientific advances have transformed this understanding.

Depending on the diagnosis, treatment may include:

- Endoscopic transnasal pituitary surgery
- Medical therapy
- Hormonal replacement
- Stereotactic radiosurgery
- Long-term endocrine monitoring
- Observation with regular MRI scans

Modern treatment recognizes that successful care extends beyond removing a tumor.

The true objective is to preserve vision, restore hormonal balance whenever possible, reduce recurrence, improve long-term quality of life, and minimize treatment-related complications.

Decades of clinical research, technological innovation, and multidisciplinary collaboration have driven this evolution.

How does multidisciplinary care improve patient outcomes?

A pituitary adenoma does not affect just one organ.

It influences the brain, the endocrine system, vision, metabolism, fertility, cardiovascular health, bone health, and emotional well-being.

No single specialist can address all these aspects alone.

Modern multidisciplinary care brings together experts who contribute different perspectives before treatment decisions are made.

A patient with acromegaly may require collaboration between a neurosurgeon and an endocrinologist.

A patient with visual loss may also need assessment by a neuro-ophthalmologist.

Residual or recurrent tumors may be discussed jointly with radiation oncologists to determine whether stereotactic radiosurgery is appropriate.

Similarly, long-term endocrine follow-up remains essential even after successful surgery.

This collaborative approach helps ensure that recommendations are based on the patient's complete clinical picture rather than on a single specialty's perspective.

From International Experience to Personalized Care

During advanced fellowship training in the United States, Dr Rao worked with internationally recognised specialists in multidisciplinary programs for complex pituitary disorders, where neurosurgeons, endocrinologists, radiation oncologists, neuro-ophthalmologists, neuroradiologists, and neuropathologists jointly evaluated patients before treatment decisions

were made.

Dr. Rao also contributed to internationally peer-reviewed research on pituitary adenoma surgery, stereotactic radiosurgery for acromegaly, Cushing's disease, Nelson's syndrome, predictors of visual recovery after transsphenoidal surgery, and factors influencing pituitary tumor management. These collaborations with leading international institutions have helped expand scientific understanding of long-term outcomes and reinforce the importance of individualized, evidence-based care.

Returning to India, Dr. Rao's vision was not simply to introduce advanced technology—it was to bring this philosophy of multidisciplinary, patient-centered, evidence-based pituitary care closer to patients and families.

Dr. Rao's Philosophy

"The greatest advance in pituitary care is not that we have more treatment options. It is that we have become better at choosing the treatment that offers each patient the safest and most effective long-term outcome. Precision begins with listening, understanding, and working together as one multidisciplinary team." — Dr. Mohana Rao Patibandla (Dr. Rao)

Translating International Research into Better Patient Care

For decades, the treatment of pituitary adenomas focused primarily on removing the tumor. While surgery remains the cornerstone of treatment for many patients, advances in endocrinology, neuroimaging, minimally invasive skull base surgery, stereotactic radiosurgery, and long-term hormonal care have transformed the way specialists approach these complex disorders.

Today, the question is no longer simply:

"Can the tumor be removed?"

Instead, physicians ask: "How can we achieve the best long-term quality of life while preserving

hormonal function, vision, and neurological health?"

That shift reflects one of the most important changes in modern pituitary medicine.

Research Should Improve Patients' Lives, Not Just Medical Literature

Throughout my professional journey, I have had the privilege of contributing to internationally peer-reviewed research involving pituitary adenomas and related endocrine disorders through collaborations with leading academic institutions, including the University of Virginia and the International Gamma Knife Research Foundation. This work has examined stereotactic radiosurgery for acromegaly, Cushing's disease, and Nelson's syndrome, as well as surgical outcomes, visual recovery after pituitary surgery, and factors affecting pituitary tumor management.

While every study explored a different clinical question, they all shared the same objective:

To help physicians make better treatment decisions and improve the lives of patients.

Research should never remain confined to journals or scientific meetings.

Its greatest value lies in helping patients understand their condition, supporting informed decision-making, and ensuring that every treatment recommendation is based on the best available evidence.

Some pituitary adenomas produce excess hormones, causing conditions such as acromegaly or Cushing's disease, while non-functioning tumors usually affect vision and pituitary function because of their size and pressure on nearby structures.

[The Role of Stereotactic Radiosurgery in Pituitary Care](#)

One of the greatest advances in pituitary treatment has been the development of stereotactic radiosurgery (SRS).

Despite its name, stereotactic radiosurgery is not traditional surgery.

There is:

- No incision

- No stitches

- No removal of bone

- No prolonged hospitalization

Instead, precisely focused radiation is delivered to the residual or recurrent pituitary tumor while minimizing exposure to surrounding structures such as the optic nerves, pituitary gland, and brain.

Radiosurgery is not a replacement for surgery.

Rather, it is an important component of comprehensive pituitary care.

Patients who may benefit include those with:

- Residual tumor after surgery

- Recurrent pituitary adenomas

- Persistent hormone overproduction

- Tumors unsuitable for repeat surgery

- Selected patients who are poor surgical candidates

International research has shown that radiosurgery provides meaningful long-term tumor control and hormonal remission for many patients when integrated into a carefully planned multidisciplinary treatment strategy.

Preserving Vision Is One of the Highest Priorities

Large pituitary adenomas frequently compress the optic nerves or optic chiasm.

Patients may notice:

- Blurred vision

- Reduced peripheral vision

- Difficulty reading

- Double vision

- Progressive visual loss

Vision often improves after appropriate treatment, particularly when compression is relieved before permanent nerve damage occurs.

Research involving Dr. Rao demonstrated that earlier evaluation and treatment, together with smaller tumor size at presentation, were associated with better visual recovery following transsphenoidal surgery. These findings emphasize the importance of seeking medical attention promptly when visual symptoms develop.

Every Pituitary Tumor Behaves Differently

One question frequently asked by both patients and surgeons is whether MRI can accurately predict how firm or soft a pituitary adenoma will be before surgery.

While imaging provides valuable information, internationally published research involving Dr. Rao found that tumor consistency cannot always be reliably predicted using MRI alone. This highlights why experienced surgical judgment, careful planning, and intraoperative decision-making remain essential components of successful pituitary surgery.

Evidence Supports Individualized Care

One of the strongest messages emerging from international pituitary research is that there is no single treatment suitable for every patient.

Some patients benefit from minimally invasive endoscopic surgery.

Others require medication before or after surgery.

Some achieve long-term disease control with stereotactic radiosurgery.

Others require lifelong endocrine follow-up and hormone replacement.

The best outcomes occur when treatment decisions are based on:

- Tumor type
- Hormonal profile
- MRI findings
- Visual function
- Overall health

Patient preferences
Scientific evidence
Multidisciplinary discussion

Modern pituitary care is therefore not about choosing the most advanced technology.

It is about choosing the most appropriate treatment for each individual.

From International Collaboration to Local Patient Care

Returning to India after advanced fellowship training in the United States, Dr. Rao's goal was never simply to introduce advanced neurosurgical techniques.

It was to bring the philosophy of evidence-based, multidisciplinary pituitary care closer to patients and families.

That philosophy continues to guide clinical practice at Dr. Rao's Hospital – International Institute of Neurosciences, where neurosurgeons work alongside endocrinologists, neuro-ophthalmologists, neuroradiologists, anesthesiologists, rehabilitation specialists, and nursing teams to deliver individualized care for patients with pituitary disorders.

Precision Medicine Begins Before Treatment

Precision medicine is often misunderstood as simply using advanced technology.

In reality, precision begins much earlier.

It begins by asking the right questions.

What type of pituitary adenoma is this?
Is it producing excess hormones?
Is vision threatened?
What are the patient's symptoms?
What are the patient's priorities?
What treatment offers the greatest long-term benefit?

Sometimes the answer is surgery.

Sometimes medication.

Sometimes stereotactic radiosurgery.

Sometimes careful observation.

Choosing correctly is far more important than choosing quickly.

The Importance of Lifelong Partnership

Treatment of a pituitary adenoma does not necessarily end after surgery or radiosurgery.

Many patients require:

Periodic MRI scans

Hormonal assessment

Vision testing

Medication adjustment

Long-term endocrinology follow-up

Rehabilitation when appropriate

Successful pituitary care is therefore a long-term partnership between patients and their healthcare team.

The objective extends far beyond tumor control.

The goal is restoring health, preserving neurological function, maintaining hormonal balance whenever possible, protecting vision, and helping patients return to productive, fulfilling lives.

What Patients Should Remember

Receiving a diagnosis of a pituitary adenoma can be frightening.

Fortunately, today's treatment options are better than ever before.

Patients should remember:

Most pituitary adenomas are benign.

Many pituitary tumors are highly treatable.

Early diagnosis improves outcomes.

Not every pituitary adenoma requires immediate surgery.

Modern treatment often involves multiple specialists working together.
Long-term follow-up is an important part of successful care.
Every treatment plan should be individualized.

Perhaps the most important message is this: Every patient's journey is different. There is no single treatment suitable for everyone. The best treatment is the one that fits the individual patient.

A Message from Dr. Rao

Reflecting on years of clinical practice, international fellowship training, research, and patient care, Dr. Rao believes that the greatest lesson medicine has taught him is remarkably simple.

"Patients do not come to us because they need surgery. They come because they need answers, guidance, and hope. Our responsibility is to recommend the treatment that offers the greatest opportunity for long-term health—not simply the treatment we are most comfortable performing. When science, multidisciplinary collaboration, and compassion work together, patients receive the care they truly deserve."

About Dr. Rao

Dr. Mohana Rao Patibandla is a USA-trained neurosurgeon and the Founder and Chief Neurosurgeon of Dr. Rao's Hospital – International Institute of Neurosciences, Guntur, Andhra Pradesh, India.

Following neurosurgical training in India, he completed advanced fellowship training in the United States in minimally invasive neurosurgery, skull base surgery, stereotactic radiosurgery, pediatric neurosurgery, neuro-oncology, and cerebrovascular/endovascular neurosurgery.

His clinical practice focuses on evidence-based, patient-centered management of brain tumors, pituitary disorders, cerebrovascular diseases, skull base lesions, spine disorders, pediatric neurosurgery, functional neurosurgery, and minimally invasive brain and spine surgery.

Dr. Rao has contributed to internationally peer-reviewed research in pituitary adenomas, acromegaly, Cushing's disease, Nelson's syndrome, stereotactic radiosurgery, brain tumors, cerebrovascular diseases, skull base surgery, and complex neurosurgical disorders through collaborations with leading international academic institutions.

About Dr. Rao's Hospital – International Institute of Neurosciences

Dr. Rao's Hospital – International Institute of Neurosciences is one of India's dedicated neuroscience centers providing comprehensive care for disorders of the brain, spine, nerves,

and cerebrovascular system.

The hospital integrates:

Advanced neuroimaging
Endoscopic skull base surgery
Minimally invasive neurosurgery
Stereotactic radiosurgery
Endovascular neurosurgery
Neurocritical care
Neurorehabilitation
Comprehensive endocrinology collaboration
Multidisciplinary treatment planning

This integrated approach allows individualized care for patients with pituitary adenomas and other complex neurological disorders.

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References

Ding D, Mehta GU, Patibandla MR, et al. Stereotactic Radiosurgery for Acromegaly: An International Multicenter Retrospective Cohort Study. *Neurosurgery*. 2019.
Patibandla MR, Xu Z, Sheehan JP. Factors Affecting Early Versus Late Remission in Acromegaly Following Stereotactic Radiosurgery. *Journal of Neuro-Oncology*. 2018.
Mehta GU, Ding D, Patibandla MR, et al. Stereotactic Radiosurgery for Cushing Disease: Results of an International, Multicenter Study. *Journal of Clinical Endocrinology & Metabolism*. 2017.
Caruso JP, Patibandla MR, Xu Z, Vance ML, Sheehan JP. A Long-Term Study of the Treatment of Nelson's Syndrome With Gamma Knife Radiosurgery. *Neurosurgery*. 2018.
Thotakura AK, Patibandla MR, Panigrahi MK, Mahadevan A. Is It Really Possible to Predict the Consistency of a Pituitary Adenoma Preoperatively? *Neurochirurgie*. 2017.

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