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Review Article



## AYURVEDIC SURGERY: UNDERSTANDING REALITIES, TACKLING CHALLENGES, AND PROPOSING PATHWAYS FOR IMPROVEMENT

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### ABSTRACT:

This is written in response to the Government of India's recent notice published in the Gazette regarding the range of Ayurvedic surgery that MS Shalya and Shalakya doctors are capable of performing. All people around the world, including contemporary doctors, acknowledge Acharya Sushruta as the "Father of Surgery" and the "Father of Plastic Surgery." This brilliant Indian physician, who had a thriving surgical practice even before other civilizations started mastering the fundamentals, is acknowledged to have contributed numerous firsts. One's former glory does not guarantee one's present accolades. We really need a reality check. The authors intend to bring to your attention the shortcomings and gaps in the current Ayurvedic surgical education and training system. The writers believe that in order to cure the ailments ailing the Ayurvedic system, surgery is necessary. Since Shalya (surgery) is their area of competence and experience, the writers only present their case in that context. They accomplish this by making the following points: the historical significance of the Shalya Tantra and the evolution of Ayurvedic syllabuses. Current BAMS & MS Shalya The Shalya Curriculum Analysis includes questions and suggested answers along with the current scenario and reality. To bring back the glory of Ayurvedic surgery, introspection and realignment are required. The writers hope to save, conserve, nurture, and uphold the sacredness of this age-old treasure trove of knowledge.

**KEYWORDS:** Ayurveda, Ayush, CCIM, Shalya, Shalya Tantra and Surgery

## INTRODUCTION:

A lot of you would open this with preconceived notions and want to doubt the title itself! Well, we've accomplished half of our task if the headline has caused you, the reader, to feel this way. That being said, we ask that you read this research with an open mind and wait to form any opinions until you have a clear understanding of the authors' true motivations. This is a written response to the Government of India's recent Gazette notification, pertaining to the range of Ayurvedic procedures that MS Shalya and Shalakya physicians are capable of doing. The anticipated responses to this announcement have come from the Indian Medical Association (IMA) and the Ayurvedic brotherhood, two distinct medical groups. While the IMA has aggressively reacted by voicing some concerns and releasing a press statement, the former is overjoyed and has applauded this news, viewing it as a victory for the system. The most important question, in the authors' opinion, is still unsolved despite the controversy and armchair debate that are taking place<sup>[1]</sup>. In other words, what is the premise here? Furthermore, what is the truth? Actually, the most pertinent query that should be raised is this: How effective is Ayurvedic surgical training in practice? And by doing this, the authors hope to highlight the shortcomings and inadequacies in the current Ayurvedic surgical education and training system. The writers believe that in order to cure the ailments ailing the Ayurvedic system, surgery is necessary. Please continue reading if you would want to learn more about the issues and the rationale behind this inquiry. Since surgery is the only area in which the writers have knowledge and expertise, they would want to argue their argument using the following points:

- 1) Shalya Tantra's historical background and the creation of the Ayurvedic syllabus
- 2) Give the MS Shalya Curriculum Analysis and Shalya BAMS<sup>[2]</sup>.
- 3) Current Situation / Actuality
- 4) Our Inquiries
- 5) Suggested remedies
- 6) Remarks

An MD Shalya Tantra in Ayurveda is held by one of the authors of this study. You read correctly. The degree granted to this author upon completion of postgraduate study in Ayurvedic Shalya Tantra was MD Shalya Tantra. Other than anorectal surgeries, no other surgical training was provided at this reputable institution where this degree was offered. This was due to administrative stalemate and the belief that "Surgery equals violence," despite the fact that Ayurveda does not condone violence. It was not for lack of infrastructure or qualified teachers. Is that really true?

What credentials does the author have, then, to write on the subject, one would wonder? Well, a great deal of committed, disciplined, and dedicated work was done to learn the the methods and ideas of surgery from numerous sources, and as of right now, the author has discovered his specialty in anorectal situations, which involve the classic Ayurvedic concepts of managing wounds and ulcers of all kinds,

including diabetic foot and urinary tract disorders. The author does not assert that he provides his students with comprehensive surgical training; rather, he maintains up-to-date surgical expertise in order to effectively instruct and mentor his pupils. He is definitely qualified to write on the topic, having spent the last 20 years teaching, interacting with hundreds of students, and closely observing the Ayurvedic system<sup>[3]</sup>.

The questions posed in this paper are not meant to be seen as being critical of Ayurveda; rather, they are an honest and sincere attempt to address the issues and discover workable answers that will help to preserve, safeguard, nurture, nourish, and spread the world's oldest system of health and well-being.

### 1. Shalya Tantra's (the Ayurvedic surgical branch) historical aspect

It is widely acknowledged that Ayurveda is ageless and existed before all known recorded medical literature. All people around the world, including contemporary doctors, acknowledge Acharya Sushruta as the "Father of Surgery" and the "Father of Plastic Surgery"<sup>[4]</sup>. This brilliant Indian physician, who had a thriving surgical practice even before other civilizations started mastering the fundamentals, is acknowledged to have contributed numerous firsts. He (Sushruta) invented surgery during a time when it was rare in other parts of the world, in the words of Dr. M. S. Valiathan. He bequeathed an amazing legacy in surgical instrumentation, management, philosophy, and technique. It makes sense that his Successors ascribed Susruta, the remarkable surgeon, divine origins. The accomplishments of our great forefathers are extensively described in the ancient writings of Ayurveda. Even if many people might find them funny, there's no denying that we came from a magnificent heritage. Written in Sanskrit at first, the Sushruta Samhita describes about 500 surgical operations and nearly 1200 ailments. "Understanding the Sanskrit Language is necessary to interpret and infer the contextual meanings in Ayurvedic studies and research," according to Gaur, B L. The Shalya Tantra's history is also a fascinating subject<sup>[5]</sup>.

The battle between the Gods and the Demons is said to have led to the development of surgery (REF), which is related to the evolution of surgical principles and their refinement during that era. Before then, we had not witnessed human suffering and wounds on that magnitude, and what was known about managing wounds and sepsis was either insufficient or useless. Therefore, the origin of both surgical sciences' development has been harm. Since then, the field of contemporary surgery and medicine has opened a new chapter and developed to the level that we are all familiar with via thorough investigation, evaluation, and improvement. Global efforts have been made to create surgical principles and practices, which are considerably advancing humankind<sup>[6]</sup>.

A lot of "impossible to even think of" procedures have been devised, and the cooperation of physicians, surgeons, scientists, and chemists has made this feasible and specialists in numerous other closely related scientific domains. Unfortunately, due to the suppression caused by British

control, Ayurveda did not flourish and was not resurrected or promoted with the same fervor or excitement by those within the system. We prefer to refer to the current state of the system as the "PAST GLORY SYNDROME." It took a lot of time to establish several committees and decide which course of development should be taken. made suggestions, many of which are still in effect today. The curriculum for teaching Ayurveda was created after much deliberation, swinging between Pure and Integrated Ayurveda for a considerable amount of time. It has since undergone numerous adjustments. The curriculum that is taught at the BAMS and MS levels now heavily incorporates both modern surgery and Ayurveda. This takes us to the following point.

## 2. Current BAMS & MS Shalya Curriculum Shalya

A casual check at the syllabus for the Master of Shalya Tantra (Ayurvedic Surgery) and Bachelor of Ayurvedic Medicine & Surgery (BAMS) programs reveals that nearly everything covered is taken directly from contemporary medical text books. There are procedures available that range from straightforward incision and drainage to head and spine injuries, thoracic trauma, cancer, and laproscopic surgeries, among others! By clicking on the previously mentioned URL, you can get the syllabus. Everything is going OK so far. Correct? Now let's examine the following point.

## 3. Current Situation/Actualities

There are about 300 Ayurvedic universities in India offers postgraduate Ayurvedic medicine courses (MD/MS) in more than 60 of those countries. A student who has passed the BAMS and fulfilled the requirements of a year-long internship must take the all-India PG entrance test and choose the MS stream in order to continue their education. These days, the entrance exam is the same for all 21 of Ayurveda's postgraduate stream offerings.

We must comprehend the kind of instruction and skill-building that a BAMS student receives while studying Ayurveda. Shalya Tantra, or surgery, is taught in the fourth year of BAMS programs. It is explicitly stated in the syllabus that the student must only watch a small number of the listed surgical operations and should only be exposed to the clinical cases. The vast majority of Ayurvedic colleges have an operation theater infrastructure that is fully operational because the regulations need them to do so in order to give the affiliations with the apex organizations and the appropriate approvals. When it comes to having qualified surgical instructors who can provide instruction in these techniques, they lack adequate resources<sup>[7]</sup>. Only a small number of universities have surgeons with the necessary training and experience performing surgery; once again, these instructors are MS Shalya Tantras, as that is the minimal qualification needed to be selected as a teacher. The theory portion of the curriculum is ultimately presented with extremely little clinical exposure at the BAMS level due to a shortage of qualified instructors with sufficient practical training and exposure. In order to make up for this, several universities offer clinical placements in nearby private or government-run district hospitals, and there is There is seldom any follow-up on the skills that the pupils learn there. When it comes time for exams, students must be given real

situations to practice clinical courses like surgery in order to assess their knowledge and skills. However, due to inadequate patient numbers and a dearth of surgical procedures carried out in the college, students are given a chit containing the name of a disease and asked to create a hypothetical case, plan a course of treatment, and write about the surgical procedure they would perform in that situation! To make matters worse, the chits are separated into two groups:

a) Long Case and b) Short Case. In a lengthy case, every detail must be documented, whereas in a brief case, only a few are. /'Relatively little is asked about the actual surgical procedures during the viva-voce tests. Prof. Dr. S.N. Gupta is quoted as saying, "The examination system has turned into a farce." When it comes to assessing a student's proficiency in the realworld application of the material, colleges, organizations, and instructors/examiners are not taking their jobs seriously. Both at the undergraduate and graduate levels, this is accurate. As a result, in practice, the tests become a formality, and over time, the standards of evaluation and testing have declined<sup>[8]</sup>.

Following successful completion of the BAMS, students must complete a one-year internship. Since this training phase will determine their future clinical practice, it is now the most important time in their career. In order to obtain clinical exposure and build confidence in their practical understanding of clinical practice, it is a reality that the great majority of students begin working in contemporary medical hospitals. This is because they have not been instructed in this at their university. Can we hold them accountable? Third-year MBBS students Aakash Sethi and Gayatri Laha state that the Planning Commission stated in its 11th Five Year Plan that AYUSH students spend less time on AYUSH modalities than is essential. These students therefore lack the self-assurance, expertise, and abilities to apply AYUSH-specific concepts and therapies, and even if they haven't received enough training in that area, they frequently choose their contemporary counterparts<sup>[9]</sup>. To make matters worse, the regulatory authorities have again imposed mandatory duties in their respective college hospitals, forcing them to perform clerical work such as filling out case sheets and making dummy case sheets in order to meet the authorities' requirements for a minimum number of patients! This is an issue. For a whole other kind of research paper! What do you believe becomes of the pupil now? Consider yourself in their position. They become frustrated but are powerless to speak up or challenge the system because doing so will prevent their completion certificates from being provided, which prevents them from registering as physicians with the appropriate state boards. There is no denying the indisputable fact that most graduates of colleges never return since there is nothing left for them there.

A small number of motivated students ultimately wind up studying for the entrance exams to pursue postgraduate degrees by moving from post to pillar. As we previously mentioned, there is only one admission exam required to enter any of the 21 Ayurvedic disciplines. Therefore, it's more luck than decision to secure a seat in the MS Shalya

Tantra stream, and even if they do, there is no guarantee of proof of their sincere curiosity for the topic. There are very few of them who are truly interested. Why do students choose MS Shalya Tantra if it is the case? The explanation is straightforward: It authorizes them to do procedures. What's wrong with this, one would wonder? How will a particular institution instruct MS Shalya PG scholars in surgery if its faculty lacks the necessary training to teach the subject at the BAMS level? It makes sense to ask, "How are these PG Scholars trained?"

Here's where the issue gets more complicated. It is a truth that many universities that offer MS Shalya Tantra courses do not require their students to train and study there full-time! Why? It's because they lack the staff and facilities needed to properly instruct their students. In that instance, an agreement would exist between the college and the students allowing them to train and/or work under a surgeon or hospital of their choosing in exchange for their periodic reporting and examination visits to the college<sup>[10]</sup>. You may guess as well as we do what happens to the necessary postgraduate research work that is expected of them! You now see why the research on Ayurveda is not up to par! Postgraduate exams also degenerate into formalities with no responsibility whatsoever. At the PhD level of Ayurvedic Shalya Tantra research, this gets extremely intricate.

The PG and PhD levels denote areas of specialization and super specialization, and one would anticipate that the research output targets these areas and is of world-class quality. The needs of society, promotes scientific inquiry, and helps develop common treatment guidelines for a variety of diseases. Nothing akin to this happens. Please remember that we are saying that most college students and pupils encounter this. Students in a few Indian institutes receive remarkably excellent instruction, the facilities are on par with those of any modern hospital, and the faculty is exceptionally skilled. Modern methods are used for surgery in Ayurvedic colleges, and a certified anesthetist oversees the process. The same standards as any other modern medical surgeon are followed when it comes to the use of modern antibiotics and the pre-, operational, and post-surgical care protocols.

Few people supplement their prescriptions with Ayurvedic medications. Therefore, it is reasonable for modern medical doctors to wonder what procedures we adhere to at Ayurvedic universities.

#### **So what happens?**

- a) The great majority of MS students studying Ayurveda lack training from their respective colleges.
- b) In either government-run or private hospital, they receive training from contemporary surgeons.
- c) There are extremely few universities that genuinely instruct MS Ayurveda scholars in Ayurvedic surgery.

Ayurvedic education is beset with numerous challenges, too numerous to address here as they fall outside the purview of this particular paper. Nonetheless, we believe that our current presentation provides a clear understanding of the issues with Ayurvedic education. For more

For further information, see the authors' work, "Reforms in

Ayurveda Education - Challenges and Roadblocks".

#### **4. Our Inquiries**

We believe it is appropriate to raise a few important queries at this point, given the media's questions and answers regarding the legitimacy of the gazette notification. They are as follows<sup>[11]</sup>:

- 1) It is nearly impossible to teach and train students in the Surgery curriculum at BAMS and MS Shalya due to its vastness and comprehensiveness. This is then used to support the argument that we should be able to practice modern surgery as it is covered in the syllabus. It makes sense that the current medical system views this as a backdoor entry admission to the surgical profession!
- 2) Do the great majority of MS Ayurveda scholars have the legal right to practice surgery if they were not trained in their respective colleges?
- 3) Should teachers be permitted to teach and administer exams if the caliber of their instruction and the standards of the exams are subpar?
- 4) After a student graduate from college, no one monitors their continued skill development whether via a credit system or another avenue.

After qualifying, one is granted the freedom to engage in any activity. Many post-graduate Ayurvedic students who studied in one of the twenty-one other fields outside MS Ayurveda are currently working as surgeons. This occurs as a result of the lack of career prospects in their area of expertise for them. They enroll in postgraduate courses solely in order to obtain an MD or MS, which will grant them the freedom to pursue their interests. They eventually enroll in training courses and begin doing surgery. Is this even permitted?

#### **The authors suggest the following "5R Approach" as a solution**

- 1) Restructuring the syllabus
- 2) Reevaluating how instruction and training are delivered
- 3) Improvement in training quality
- 4) Rearranging priorities
- 5) Make Contact

##### **1. Reorganizing the syllabus**

As Prof. Kishor Patwardhan puts it so eloquently, "the current Ayurvedic curriculum has the flaw of not clearly defining what is expected of an Ayurvedic physician upon graduation from a college". It is necessary to start working hard at restructuring the Shalya Tantra syllabus in Ayurveda so that it is more focused on practical application. Many unnecessary and unworkable points need to be eliminated. If the competent teachers are included in the process of creating a new syllabus, this can be accomplished with ease. The majority of the reference books are translated copies of contemporary medical text books, and their quality is appalling. Very few texts go through many editions. to deal with the current clinical issues<sup>[12]</sup>.

##### **2. Reevaluation of Training and Teaching Delivery**

If Ayurveda's Shalya Tantra is to be accepted both domestically and globally, it is imperative that the hiring process for teachers be reviewed. Frequent skill improvement via certification programs or credits should be made



necessary, and a database detailing each person's area of expertise needs to be established and updated on a regular basis. Every college should require surgical audits, and an outside evaluation ought to be included. In order to avoid false allegations being made against the system, it is necessary to stop unscrupulous or inappropriate use of certain treatment processes in the hands of unskilled or poorly qualified individuals, to quote Dr. Narendra Bhatt.

### 3. Improvement of Training Quality

This is a no-brainer. Needless to say, practice makes perfect, and as surgery is both a skill and an art, it must be constantly honed. To help our scholars understand the value of our system, evidence-based, objective training based on integrative approaches should be provided. However, as Dr. Narendra Bhatt states, "The whole effort of integration should be 'Shastra and Science' rather than 'Shastra v/s Science', which is what is happening today in the present context," this presents a significant challenge. Prof. Dr. G.S. Lavekar further states, "It is true that in the time span that has gone, some significant literature of Ayurvedic literature is no longer available. Thus, a lot of crucial information is omitted, including information about organ transplant surgery and anesthesia. And all that's available now are references. All sciences are developing fields of study, and research is an ongoing endeavor. This also applies to Ayurveda; while new principles may be introduced, the fundamentals stay the same. The approach is modified in light of related modern sciences.

### 4. Realignment of Priorities

It is highly necessary for the Ayurvedic system to reflect deeply on establishing the proper priorities in order to develop as a worldwide healthcare provider. It requires a clear vision and mission that can be carried out in an accountable and transparent manner. The Ayurvedic system is intolerant of criticism and queries from the public. This contradicts Ayurveda's basic principles because, according to the texts, the scientific technique of inquiry is universally applied and our ancient masters encouraged questioning. The fact that BAMS and MD/MS Ayurvedic doctors plan protests and processions to call for the authorization to dispense allopathic drugs is a very regrettable situation! As a result, society becomes less confident in the ancient discipline of Ayurveda.

### 5. Be Intense

Ayurveda can't afford to be cautious. There is a vast world out there that Ayurveda can help, and if the discipline is limited in what it studies, it will never advance. In order to achieve the best outcome for our nation's citizens, we must engage with the contemporary healthcare system. Rather than competing with them, we ought to be standing shoulder to shoulder. To ask for assistance, we must acknowledge our limitations and extend our hand to the other side. Adopting a confrontational mindset and dwelling on the previous achievements of Ayurveda would not benefit the science or practice of Ayurveda in the present or the future. It is important to highlight the numerous areas in which Ayurvedic therapies offer excellent advantages. Ayurveda is quite effective in treating conditions like diabetic foot, varicose veins and their consequences, and arterial ulcers, to

name a few. Doesn't Ayurveda and its supporters have an obligation to spread the benefits to the scientific community? world through well planned investigations, so that contemporary medical professionals will begin to accept our findings? If we want to make progress, we must provide our evidence and remain receptive to criticism, discussion, and debate. In order to raise knowledge of the advantages of both traditional and scientific Ayurveda, we should also be interacting with the local and global population. Experts in the subject should carefully review and select the information. It is a known truth that individuals are conned and taken advantage of by the abundance of false information that exists regarding Ayurveda and its herbal and formulations. The greatest danger to Ayurveda's survival is the dilution of its tenets.

In the words of Prof. Dr. Manoranjan Sahu, "Under the table leadership of Prof. K N Udupa during the 1970s, both the facilities of Ayurveda and Modern Medicine flourished and the surgeons of Ayurveda got full freedom to practice surgery and serve the community" and "Ongoing exploration and researches are required to support the development of surgical practice in Ayurveda in order to restore the lost glory of Ayurveda Surgery and to serve humanity in better ways".

### CONCLUSION:

Prof. Dr. Ajay Kumar Sharma, the former director of the National Institute of Ayurveda in Jaipur and the former chair of Ayurveda at Rangsit University in Thailand, believes that in order to standardize, enhance, and promote Ayurveda, there needs to be a shift in the way Ayurvedic education is taught in India and around the world.

Furthermore, changes must be made to the current educational system, which includes a thorough evaluation, discussions, and significant changes made at the local level through thoughtful discussion among academics, educators, and decision-makers. It is time to reach out and advance research for the good of humanity, not to confront and agitate. It's also time to acknowledge our own shortcomings, reflect on them, and construct strong academic and clinical skill development programs to spare upcoming generations of Ayurvedic physicians from having to deal with these legal complexities.

"Mainstreaming Ayurveda looks to be an approach to bridge the gap between what is expected and what is practised in it," say professors Sanjeev Rastogi and Ram Harsh Singh. The only method to bring about this mainstreaming and create any kind of meaningful influence would be through a multi-level, multi-stake approach that includes Ayurvedic education, research, and practice.

Public health expert Prachi Singh notes in her article, "The contest between AYUSH and Allopathy Shouldn't Forget Public Health". A medical system's actual worth is determined by how it affects the general public's health. It is past time for the Ayurvedic system to start paying attention to the questions that people are asking. Rather than responding automatically, constructive conversation with all parties involved is required, and a plan for achieving this goal must be developed in order to make Ayurveda accessible and acceptable on a local and international level.

The writers sincerely believe, feel, and want Ayurveda to be revitalized, nourished, safeguarded, and promoted in the proper way in order to become a genuine worldwide healthcare provider. Ayurveda must have the ability to rise above and adjust to the new difficulties in order to handle them. to address issues in a way that is impartially accepted by society through rational analysis and explanation.

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