

Core Competencies for Hair Restoration Surgeons Recommended by the International Society of Hair Restoration Surgery

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BACKGROUND Because hair restoration surgery has changed so significantly, the International Society of Hair Restoration Surgery (ISHRS) recently developed and published a Core Curriculum for Hair Restoration Surgery (CCHRS). The ISHRS organized a task force to develop training programs that would not only present the CCHRS but also provide the practical experience necessary to allow a physician to practice safe, aesthetically sound hair restoration surgery. The task force recognized early on that identification of core competencies for hair restoration surgeons was essential to guiding the development of these training experiences. This article presents the competencies that have been identified.

OBJECTIVE The intent of the Core Competencies for Hair Restoration Surgery is to outline the knowledge and skills that are essential to accurately diagnose and treat hair loss, to ensure patient safety, and to optimize aesthetic results. The ISHRS hopes that all existing surgery and dermatology training programs teaching hair restoration surgery procedures will find the Core Competencies useful in developing their curriculums.

METHODS The Core Competencies were developed through an organized review of the CCHRS by a team of experienced hair restoration surgeons and educators and reviewed and approved by the ISHRS Board of Governors.

RESULTS The diversity of these competencies demonstrate that contemporary hair restoration surgery is a specialty requiring knowledge of several medical disciplines, including genetics, endocrinology, dermatology, tissue preservation, and surgery.

CONCLUSION The International Society of Hair Restoration Surgery believes identification of these Core Competencies is an important contribution to physician education in hair restoration surgery, and physicians who demonstrate competency in these skills will satisfy patients with contemporary results in a safe environment.

The authors have indicated no significant interest with commercial supporters.

This paper presents the Core Competencies for Hair Restoration Surgery as defined by the International Society of Hair Restoration Surgery (ISHRS). In January 2006, the ISHRS published its recommended Core Curriculum for Hair Restoration Surgery (CCHRS).¹ During the development of the CCHRS, the ISHRS realized that hair restoration surgery has evolved into a complex integration of multiple medical disciplines, including genetics,

endocrinology, dermatology, and surgery. Mastering these diverse and complex knowledge base and skill sets would require a more structured programmed exposure than just continuing education seminars. To that end, the ISHRS organized a task force of experienced physician educators to formulate effective physician training programs that would impart the essential skills to the learning physician.

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Hair restoration surgery has developed into a specialty with a complex curriculum. Unfortunately, there are no hair restoration surgery residencies. To fill the need, the ISHRS has developed Fellowship Training Guidelines² and has credentialed and approved seven such programs. However, a physician looking to master hair restoration surgery can rarely afford to abandon his/her livelihood for a full-time training position. The ISHRS Physician Training Committee was charged to develop a pathway whereby a novice physician could attain competency without abandoning his/her livelihood.

Because of the complex nature of the subject matter, the training is segmented into basic and advanced principles and techniques. In addition, learning any surgical technique requires a relationship with a mentor who is willing to demonstrate and closely supervise the student surgeon's progress. Our current educational system of symposiums or live surgery workshops cannot fulfill this requirement.

In an effort to provide both the didactic material and a supervised mentored training experience, the ISHRS has developed training programs, including a basics program that includes didactic lecture material and a hands-on cadaver laboratory, as well as an advanced program of didactic presentations and a series of specialized workshops. In addition, an organized Preceptorship Program is being developed.

Another critical task is to track the progress of the student through the diverse and complex CME program. We present the Core Competencies, a series of complex skills that could be observed and judged for correctness and used with the CCHRS by the faculty to develop learning objectives for lectures, workshops, and customized individual preceptorships.

Mastery of the Core Competencies can be assessed by both the student and the faculty and used as a benchmark of progress toward the completion of the training program. The ISHRS also hopes that this document will be of value to residency training

programs that include hair restoration surgery procedures as one of their core educational goals, to develop their learning objectives and evaluate their residents' progress.

Below are the core competencies that the ISHRS deems essential for hair restoration surgeons. A hair restoration program should provide the student with the skills necessary to perform all the following tasks.

- (1) Counsel and advise patients on the risks and benefits of hair restoration surgery. Address the patient's specific general medical and psychological condition, including consideration of the patient's age, sex, physical examination, and family history of hair loss.
- (2) Identify, advise, and manage patients whose hair loss is not androgenetic in etiology.
- (3) Design integrated medical and surgical treatment plans, including hairlines and crowns, for patients between the ages of 16 and 65 who have Norwood-Hamilton patterns II through VII and Ludwig patterns I, II, and III.
- (4) Set up a hair transplant operating room that will provide a safe environment for patients and staff, including, but not limited to, sterile techniques, proper management of biohazardous materials, and ergonomically sound work stations.
- (5) Harvest hair bearing donor scalp using techniques that minimize follicular damage and maximize donor scar cosmesis.
- (6) Prepare follicular unit grafts from donor tissue with minimal follicle transection. Demonstrate techniques to maximize graft survival between preparation and implantation.
- (7) Prepare appropriate sized recipient sites for hair grafts with proper attention to exit angle, hair direction, depth of incision, and spacing, so as to attain a natural appearance and optimize hair growth.

- (8) Place follicular unit grafts into appropriately sized recipient sites with minimal physiologic and physical follicular trauma.
- (9) Calculate and administer an appropriate dose of medication for sedation and local anesthesia for hair replacement surgery, including the use of tumescent solution and high dose epinephrine solution.
- (10) Recognize and demonstrate appropriate modifications to transplant design and treatment plan for patients who have had prior scalp surgery and identify the appropriate time to integrate scalp extension or expansion into a patient's treatment plan.
- (11) Demonstrate the proper use of basic life support equipment, including automatic external defibrillators and adjunctive equipment to airway management.
- (12) Manage complications of hair restoration surgery, including syncope, postoperative infections, hemorrhage and hematomas, postoperative pain syndromes, wide donor scars, and suboptimal results.
- (13) Use the basic principles of adult education in the demonstration format to train nurses, medical assistants, and surgical technicians to become hair transplant technicians competent in slivering, cutting, and placing follicular unit and multiunit grafts.

Contemporary hair restoration surgery is a true specialty requiring the knowledge of multiple medical disciplines.

The ISHRS presents the Core Competencies in Hair Restoration Surgery to educational curriculums for postgraduate physicians and provides a structured evaluation protocol that residency training programs teaching hair restoration surgery can use. As the ISHRS gains more experience with hair restoration surgery, it will offer future refinements.

The International Society of Hair Restoration Surgery is a nonprofit medical association comprised of more than 750 physicians and surgeons and 150 surgical assistants who specialize in hair restoration. Its scientific meeting is held in various locations throughout the world on an annual basis to advance the art and science of hair restoration surgery. The International Society of Hair Restoration Surgery is accredited by the Accreditation Council for Continuing Medical Education and sponsors an annual meeting, regional workshops, online webinars, and other training programs. The *Hair Transplant Forum International* is a publication of the ISHRS that is published every other month.

References

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COMMENTARY

The article written by Puig and colleagues details the core competencies of hair restoration surgery. The composing counsel was charged with the task of identifying basic knowledge essential for education in hair restoration surgery. Although constructing core competencies may appear to be an academic exercise, these competencies underscore the tremendous strides the field has made over the last decade.

Neither the medical field nor the lay public has an appreciation for the remarkable accomplishments in this field. Not only do hair restoration surgeons routinely produce scalp coverage with natural results, but they also often do so in a single session. Achieving undetectable results has been the goal of the International Society of Hair Restoration Surgery (ISHRS) worldwide. The educational efforts of this organization have reaped benefits and exemplify innovation in medical education.

In March 2008, the Accreditation Counsel of Continuing Medical Education certified the ISHRS for meeting accreditation requirements, bestowing on it the honor of “Accreditation with Commendation”, the highest level a provider can receive. The ISHRS meetings are unique in that they routinely integrate basic science courses on hair restoration surgery, intermediate and advanced courses, live surgery workshops, didactic lectures, and video coverage of the entire field. Key speakers from outside the field are routinely invited to these annual meetings. Education grants, awards, and e-mail exchanges are structured into the organization. The scientific meetings held by the ISHRS are extraordinary. Other medical societies would gain helpful insights into conducting educational sessions by observing the efforts of this society composed of physicians from diverse medical backgrounds.

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