Retina and Vitreous Subspecialty Practice in Latin America

Collaborative research is helping to raise awareness of vitreoretinal advances.

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n Latin America, medical services, especially ophthalmology, conform to a particular scenario: Despite a vast majority of poor people with very restricted access to prompt and good quality health services, there are a number of health systems with well-equipped and wellstaffed facilities, offering so-called "first-world" medical attention, that primarily serve the growing middle class population.

There are also regional divides within Latin American countries. In major cities, where the highest levels of technology and ophthalmic subspecialty care are available, fellowship programs are attended by local and foreign young ophthalmologists, who are encouraged and trained to achieve standards common to North American and European institutions. These same standards may not be possible in rural and other nonurban settings where advanced technology may not be available.

Health care in Latin American is divided into 2 main sectors: government-based public care and private practice. Public opinion holds that a lack of government funds is oriented toward public health care at all levels, from patient education to support for health teams to tertiary care centers.

Ophthalmology, as a medical specialty, receives about 5% of the national spending dedicated to health care in general, and is excluded from the traditional areas of medical priority that include general surgery, internal medicine, obstetrics, and pediatrics. Ophthalmic care in public practice, with notable and honorable exceptions in certain Latin American countries, does not reach the level offered at private institutions. Public health care providers in most instances are not able to keep up with the expanding population that requires ophthalmic care.

This background helps to explain why private groups and individuals have been almost exclusively responsible

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for advances and achievements in ophthalmology practice and knowledge around the Latin American region.

The Pan-American Association of Ophthalmology (PAAO) has played an invaluable role in the development of retina and vitreous as a subspecialty in Latin America, among its many others contributions to the improvement of ophthalmology in the region. This has been accomplished by teaching programs and meetings sponsored or organized by PAAO since its inception.

Starting in the second half of the 20th century, a small number of Latin American ophthalmologists made great efforts to travel to the United States and Europe for training in retina and vitreous as a subspecialty. As a result, the ophthalmologists trained in these far-flung fellowships brought home priceless knowledge to share with their colleagues, thereby upgrading the level of vitreoretinal practice in their homelands. In addition, numerous formal fellowship programs have been initiated around the region, expanding young surgeons' opportunities for training in the subspecialty without leaving their own countries. Even today, however, there is a very competitive environment that makes it hard for interested ophthalmologists to find a place to complete a fellowship program in Latin America, the United States, or Europe.

Any description of retina and vitreous practice in Latin America must make mention of 3 groups that have helped to develop the subspecialty in the region. In order of their founding, these are the Latin American Group of Ocular Angiography, Laser and Vitreoretinal Surgery (GLADAOF); The Pan-American Retina and Vitreous Society (PRVS); and The Pan-American Collaborative Retina Study Group (PACORES).

GLADAOF

In 1977 in Caraballeda, Venezuela, during the 2nd Venezuelan Congress of Ophthalmology, a group of Latin American ophthalmologists decided to create a new society dedicated to exchanging knowledge about fluorescein angiography and laser techniques among specialists. The first meeting of the group, dubbed the Grupo Latinoamericano de Angiografía Ocular, Láser y Cirugía Vítreo-retiniana (GLADAOF) was held during the 3rd Venezuelan Congress of Ophthalmology in Caracas in 1981. It was decided to hold GLADAOF meetings every 2 years.

The founding committee included well-recognized Latin American ophthalmologists dedicated to retinal diseases, including Arturo A. Alezzandrini, MD, of Argentina; Alejandro Dalma, MD, of Mexico; Darío Fuenmayor-Rivera, MD, of Venezuela; Álvaro Rodríguez, MD, of Colombia; Pedro Saénz, MD, of Peru; and Cristiano Barsante, MD, and Hilton Rocha, MD, of Brazil. In 1988, GLADAOF became the first subspecialty society to become affiliated with the PAAO, followed in the course of time by other subspecialty societies.

In Chile in 1994, GLADAOF organizers decided to invite all retinal specialists, including vitreoretinal surgeons, to become members. This invitation was mainly motivated by the interest that had been expressed by many young retina specialists from several Latin American countries in the late 1980s and early 1990s to participate in their meetings. A total of 9 GLADAOF Forums have been organized in countries including Argentina, Brazil, Chile, Colombia, Mexico, Peru, and Venezuela.

PRVS

During the 2003 Pan-American Congress of Ophthalmology in San Juan, Puerto Rico, a group of GLADAOF members, with the blessing of the PAAO board of directors, decided to create the PRVS as the official retina and vitreous subspecialty society affiliated with the PAAO, continuing with traditional forums every

The first PVRS congress was held in Quito, Ecuador, in 2004. Since then, every 2 years the current PVRS

president hosts the meeting in his or her home country, the most recent being held in San Juan, Puerto Rico, in June 2014.

Since its beginnings, the PRVS has become the most respected retina and vitreous organization in Latin America, following the tradition of academic excellence initiated by GLADAOF and improving upon it where needed, mostly in regard to surgical topics. The major goals of the PRVS are to maintain and improve the scientific quality of the biannual congress, to publish educational materials in Spanish and Portuguese with local data, to organize or sponsor combined meetings with other multinational retina societies, to stimulate the publication of scientific literature in Latin America, and to allow residents and fellows in the region to improve their presenting skills and curricula vitae.

PACORES

For many years, numerous Latin American vitreoretinal specialists have actively participated in top-level international meetings such as those sponsored by the American Academy of Ophthalmology (AAO), the American Society of Retina Specialists (ASRS), and the Association for Research in Vision and Ophthalmology (ARVO), among others. Linked by a cultural background, many of these ophthalmologists started having informal discussions in the hallways, leading to lasting friendships. However, the participation of Latin American vitreoretinal specialists in these international meetings was basically due to their own individual efforts.

At the present time, more than 110 periodicals pertaining to ophthalmology and vision science are published. Researchers from the United States have historically been the most frequent contributors of research publications in these fields. The contribution of Latin American practitioners to the ophthalmic literature has been poor in contrast to the high level of quality achieved in ophthalmic practice in the region during the past 3 decades. Several vitreoretinal specialists wished to increase contributions to the literature coming from Latin American countries and to proudly demonstrate the advances achieved in the subspecialty.

Over the past few years, pharmacotherapy has revolutionized the treatment of and prognosis for several vitreoretinal diseases. Many of these new treatments are out of reach for the majority of Latin American patients due to their costs, leading to a treatment gap between the developed world and Latin America, a frustrating condition for our physicians. Thus, in 2005, at the 23rd Annual Meeting of the ASRS in Montreal, Canada, the possibility of scientific collaboration to try to find alternative treatments for Latin American patients and to

promote the publication of local work was discussed. The idea of a research group from Latin America based on a combination of academic achievements and friendship was conceived at the AAO Annual Meeting in Chicago, Illinois, in 2005.

The bevacizumab (Avastin, Genentech) "boom" provided a once-in-a-lifetime opportunity for this project to flourish. During the World Ophthalmology Congress in São Paulo, Brazil, in 2006, a group of 11 centers from 8 countries was officially established as the PACORES.

The 2006 Bascom-Palmer Angiogenesis Meeting served as the first public forum for the group's work. Since then, more than 200 scientific papers or posters with at least 1 PACORES investigator as author have been presented at international meetings including ARVO, PRVS, the Asia-Pacific Academy of Ophthalmology, ASRS, the European Vitreoretinal Society, Club Jules Gonin, the Retina Society, the Macula Society, the AAO Annual Meeting, Vail Vitrectomy, the World Ophthalmology Congress, and others. At this time PACORES has published 30 papers, with 2 more accepted for publication and several under peer review, making PACORES one of the most prolific multicenter groups in ophthalmology on the planet.

The work done to date by PACORES shows that it is possible to produce high-quality scientific work in a developing region of the world. This can be accomplished by pooling talent, working hard, encouraging camaraderie, and strictly following scientific principles.

CONCLUSION

The PACORES initiative has now started to be imitated by other ophthalmic subspecialty groups affiliated with the PAAO. Hopefully our efforts are helping to raise not only the academic level of the group's own research but also that of ophthalmology as a whole in Latin America, altering traditional negative perceptions of our specialty. All of these changes are undertaken in order to provide continually improving medical care to our patients, the main reason that we struggle against the diseases and everyday difficulties mentioned above.

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