

Conquering Pain: The Evolution of Regional Anesthesia in the Philippines

The history of Regional Anesthesia is a beautiful narrative of man's quest to conquer pain from a disease or surgery. From its ancient beginnings, to the discovery of cocaine as an anesthetic and to the evolution of modern technology, Regional Anesthesia has revolutionized not only how pain is treated but also how surgeries are performed. It has also promoted a culture of safety that translates to better patient care, outcome, and satisfaction.

The beginnings of Regional Anesthesia date back to the ancient civilizations. The Greeks and Egyptians pioneered the use of opium, alcohol, and scopolamine to alleviate pain. The Chinese used acupuncture. The Indian culture used both herbal medicine and yoga.¹ However, most historians consider the official birth of Regional Anesthesia in 1884 when Carl Koller discovered the local anesthetic properties of cocaine. His tongue became numb after accidentally licking a few grains of cocaine. He then translated this discovery into using a solution of cocaine as an anesthetic for the eye.² In the following year, the first documented nerve block was performed by two surgeons - William Stewart Halsted and Richard Hall. They blocked the inferior alveolar nerve and the antero-superior dental nerve using cocaine as an anesthetic. This anesthesia technique has made a big impact in the practice of odontology since its introduction in 1885, because it offered dentists a way of performing maxillary procedures without pain.³

As cocaine is highly addictive, toxic, and has many adverse effects, the next century saw the development of local anesthetics that are longer-lasting and have better safety profiles such as lidocaine, tetracaine, bupivacaine, and ropivacaine.⁴ The 20th century also saw the introduction of the nerve stimulator. It allowed anesthesiologists to locate nerves more accurately, thus improving the efficacy and safety of nerve blocks. However, this technique was still at risk of failure and did not prevent injuries involving direct puncture on blood vessels and nerves.⁵

In the past 50 years, Regional Anesthesia has since advanced exponentially, especially after the introduction of ultrasound-guided regional anesthesia. La Grange and his colleagues described and documented the first ultrasound-guided nerve block in 1978 wherein they used a Doppler device in performing supraclavicular blocks for upper extremity procedures.⁶ With the invention of modern ultrasound machines that provide clearer imagery of nerves and the structures surrounding them, the practice of Regional Anesthesia has become safer and more effective.

The history of Regional Anesthesia in the Philippines mirrors its global history – from its rudimentary beginnings to the advanced clinical practices that are uniquely intertwined with the challenges of the healthcare system of a developing country. Long before the advent of modern medicine, indigenous Filipino communities had already been using various plant extracts, folk medicine, and traditional methods to relieve pain.⁷ The Spanish colonial period introduced Western medical practices to the Philippines, but it was only during the American occupation, after World War II, that significant medical advancements in anesthesia trickled into our country. During this time, Filipino anesthesiologists trained abroad, returned home, and became pioneers in providing safer anesthesia techniques including knowledge and skills in Regional Anesthesia. One of them was Dr. Quintin J. Gomez, considered as the Father of Philippine Anesthesia. With his army-type portable to-and-fro Heidbrink anesthesia machine, he introduced and transformed the practice of modern anesthesia in the country, making it safer, more effective, and accessible.⁸

The next five decades that followed the war were a time of growth for Philippine Anesthesia. Regional Anesthesia then was performed mainly using anatomical landmarks and at times through the help of a nerve stimulator. Dr. Benigno Sulit Jr. and Dr. Wilfredo Alarcon stand as prominent figures among the pillars of Regional Anesthesia during this period, having championed the early advancements and training in the discipline.⁹ During this period, the Philippine Society of Anesthesiologists (PSA) and the Philippine Board of Anesthesiologists (PBA) were also established. They played a key role in advancing the anesthesia practice by overseeing anesthesia training, research, and policy development.¹⁰



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The start of the 21st century brought with it new challenges and opportunities for Regional Anesthesia in the Philippines. This period is characterized by a rapid development in the Regional Anesthesia practice. Driven by the global trend towards safer and more effective pain management techniques that allowed for faster patient recovery and reduced hospital stay, Filipino anesthesiologists trained abroad in major regional anesthesia training centers in Europe, North America, and Asia. Upon returning home, they introduced the technique of performing neuraxial, peripheral nerve, and fascial plane blocks under ultrasound guidance. They also organized and conducted workshops, local and international conferences, journal clubs, lectures, and simulations all over the Philippines, attended by both local and foreign speakers, facilitators, and delegates.⁹

To further promote the common interests of regionalists, to continue the spread of knowledge, to teach the skills, and to further advance the safe practice of regional anesthesia, two organizations were established – Regional Anesthesia Society of the Philippines (RASPhil) in 2017 and the Manila Academy of Regional Anesthesiologists (MARA) in 2019. In recognition of the need for formal training in Regional Anesthesia, the last decade has also seen the establishment of Regional Anesthesia Fellowship Programs in several training institutions in our country, including our very own Regional Anesthesia Fellowship Training Program at the University of the Philippines - Philippine General Hospital which started accepting trainees in 2019. Last year, the Philippine Board of Anesthesiologists conferred the title of Specialists in Regional Anesthesia to 88 Anesthesiologists.^{9,11} Thus, the seed that Dr. Sulit and Dr. Alarcon have planted has grown into a full-fledged and well-organized subspecialty.

Looking forward, the future of Regional Anesthesia in the Philippines is very promising, but will still require continuous effort in several key areas. Right now, access to the technology of modern imaging equipment is limited to the major tertiary centers of the country. There should be continued investment in healthcare infrastructure, training, safety protocols, and technology. More Regional Anesthesia specialists should also be trained and deployed in the remote and underserved areas of the country.

In conclusion, the story of Regional Anesthesia in the Philippines is a testament to the strength and adaptability of the anesthesia community. From its indigenous roots to the modern era, the history of Philippine Regional Anesthesia is a story of progress and perseverance to further elevate, innovate, and provide better health care for the Filipino.

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