

FOR THE MEDICAL POST
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*On The World Cuban Neurosurgeon
(Canada) Dra. Hilda Molina
in Cuba*

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The Cuban neurosurgeon, Dr. Hilda Molina, who was the first woman in the world to perform the revolutionary new operation for Parkinson's disease last April and who has performed the operation successfully three times since then, is a petite, vivacious, indefatigable and determined woman of forty-four.

She was on the phone as I entered her tiny office at the Institute of Neurology in Havana where she is Assistant Director. I heard her exclaim enthusiastically: "magnifico" and "maravilloso".

She had an irrespressible smile on her face when she hung up the phone. "That was the wife of Roberto," she announced. "She says he drove the car today for the first time and that he is just fine." She was referring to Roberto Delgado, the fifty year old textile factory mechanic whom she had operated on in September 1987 for Parkinson's. Drugs had failed to control the disease. Only days before she had travelled to Holguin in eastern Cuba with her multi-disciplinary team to perform the same operation on Juan Proeza, a worker at a nickel plant.

As head of the Cuban neuro-transplant team, which is made up of 135 specialists, Dr. Molina wants to carry her transplant techniques to the major hospitals of the island. Due to the emphasis placed on public health since 1959, Cuba now has well-equipped and well-staffed hospitals in many of its fourteen provinces.

In June 1985, Dr Molina performed an operation to cure a young Nicaraguan patient suffering from partial paralysis of the legs and speech impediments due to a brain injury. The technique, based on experimental work carried out twenty years ago on animals by Dr. Harry Goldsmith, a professor of surgery at the University of Boston, consists of taking tissue taken from the patient's great omentum in the area of the intestines and transplanting it deep within the brain. It had only been carried out on human beings in the United States and Mexico.

It was last April 26 that Dr. Molina performed her first anti-Parkinson's operation thus making Cuba the fifth country in the world where this delicate tissue transplant into the brain has been carried out. At that time the revolutionary technique had only been performed in Sweden (1982), Mexico (1986), China (1986), and the United States only weeks before it was performed in Cuba.

This operation consists of taking tissue from the adrenal gland and transplanting it into the brain in order to increase the production of dopamine. Clinical studies have proven that the shortage of dopamine in the brain creates the symptoms of Parkinson's Disease such as uncontrollable trembling, muscular rigidity and the loss of ability to make voluntary movements. Parkinson's Disease has been estimated to affect about two

percent of the world's population.

Tiny in stature, athletically-built, and looking in excellent shape for her age, Dr. Molina is proud of her twenty-four year old son who is also a physician. But, she says, after two marriages and divorces she is not ready to jump into marriage again because it has been impossible to find a man who understands the total dedication to a profession which allowed her to conquer the male-dominated heights of neurosurgery in a country where machismo has deep roots.

"I am not criticizing men in any way. But the common idea of men is that the women should devote time to her home. But when I have to take time out from my work and study I don't feel good about it. I understand men, really I do. But I would have to find a very special man." She said that so far she hasn't succeeded.

The Cuban neurosurgeon has been honored in Cuba, and the mass media, television, newspapers and magazines have made her a well-known personality on the island. Last June she received a visit from Cuban president Fidel Castro who is the main thrust behind Cuba's ambitious public health programme. He promised full government support for her neurotransplant team and presented her with a Japanese-made computerized microscope for the new operating room at the hospital.

Speaking of her former marriages she said: "I can't stand arguments. I need a great deal of peace and quiet as well as stability in order to do my job properly. I spend a lot of time with my patients and often stay at the hospital most of the night. I cannot have pressure put on me to return home at a certain hour."

Dr. Molina began her medical studies when she was twenty-five years old and already had a five year old son. In accordance with the rules of Cuba's government-run medical school at the time, she was obliged to live in a dormitory with the other students. She said her mother, who is now seventy-seven years of age, took care of the child until she graduated.

She received her medical degree when she was thirty years of age in 1974. She graduated top of her class from among more than a thousand students. This permitted her to choose her speciality. She chose neurosurgery - a speciality that no Cuban women had ever entered. There were efforts to dissuade her. She was told that she was too short. She retorted, "Then I'll stand on a box when I operate." She was told that she was not physically strong enough, to which she countered, "I'm as strong as you are."

She was the only woman in the group of aspiring neurosurgeons at Havana's Institute of Neurology. She said some of her colleagues placed bets on how long she would last.

"Sometimes women limit themselves but sometimes there are social pressures that do not allow them to dedicate themselves to a difficult speciality which has been the reserve of men," Dr. Molina said. "But I decided a long time ago to devote myself to my work. I feel a sense of satisfaction because work and study

have been and are the motivating forces of my life."

Most Cubans love to go out on the town for a bit of cha-cha-cha but Dr. Molina is not one of them. "Instead of going to a fiesta or a cabaret, I prefer to study and I am extraordinarily happy when I do so," she said, flashing her charming smile which gives little evidence of her iron-lady strength of character.

Dr. Molina is now in charge of a centralized programme for the study and treatment of Parkinson's Disease on the island. Her idea is to organize a national network that will detect cases of Parkinson's in its early stages and to provide for the proper care of its victims under Cuba's free-of-charge public health system.

"Most cases of Parkinson's can be controlled with the proper drugs. The new operation will be used on those with advanced cases of the disease who do not respond to those drugs," she said.

Dr. Molina learned the operating technique for Parkinson's from its originators in Mexico City, Dr. Ignacio Madraz, a neurosurgeon, and Dr. Rene Drucker Colin, a physiologist. Dr. Drucker Colina assisted Dr. Molina during the first operation last April 26 and Dr. Madraz assisted in the second operation in June.

The idea for the operation stemmed from the discovery that the brain of Parkinson's disease sufferers produces less dopamine than that of healthy people.

Dr. Abraham Lieberman, a professor of neurology at New York University Medical Center and chairman of the medical advisory board of the American Parkinson Disease Association went to Mexico last Spring where he visited four people who had received the tissue implants. The New York Times quoted him as saying, "I think I witnessed history."

The original work of transplanting dopamine-producing tissue into the brain was done in Sweden. But it was Dr. Madraz and Dr. Drucker Colin in Mexico who perfected the operating technique. Dr. Molina praised the two doctors as "extraordinarily generous with their knowledge and men with a great sense of human solidarity."

Hilda Molina was born and educated in the town of Ciego de Avila in Central Cuba, an area where sugar cane plantations, cattle farms and citrus groves predominate. She said her family had to struggle for a living. Her father, after first working as janitor at a local movie theatre, became a teacher of physical education. Her mother was a seamstress who, she recalls, worked late into the night. "And Grandfather," she added, "worked at anything he could find."

She graduated from high school at sixteen years of age in 1959, the year the Cuban revolution led by Fidel Castro triumphed. Two hundred new junior high schools were established and teachers were needed. She became a history teacher, and at eighteen years of age became the principal of a Junior High School while simultaneously going through teachers' college.

In 1963, Hilda Molina, an impassioned supporter of the Cuban revolution, volunteered for the Cuban Armed Forces and stayed in the service until 1967. But her great dream was to become a doctor. "Whenever I passed a hospital I felt sad because I wanted to be inside working as a physician."

In 1968 she finally entered medical school in Havana, graduating in 1974. She became a full fledged specialist in neurosurgery in 1978. Toward the end of 1980, she volunteered for work in Algeria following a serious earthquake there and spent over two years in that North African nation "working as a neurosurgeon seven days a week and at any hour of the day or night."

"I have worked hard and I like to work hard," she commented.

Dr. Molina says she and her neurological transplant team in Havana are in touch by mail with leading specialists in other nations. The team is working to perfect its operational techniques and is also carrying out basic research and experiments on animals in the field of brain surgery and transplants.

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