

Professor Iglesias – Physician, Inventor, and Political Prisoner

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Introduction: The Iglesias resectoscope is used around the world as an important tool in the urologist's surgical armamentarium. The biography of Iglesias himself, and how the resectoscope came to be, is less well known. We aimed to elucidate the background of the Iglesias instrument, its inventor, and his role in the development of modern transurethral resection techniques

Sources and Methods: We conducted interviews with surviving colleagues and students of Jose Iglesias, referenced secondary texts, and contemporary medical publications.

Results: Jose Iglesias was already a well-regarded urologist born in Havana Cuba having invented the instrument that bears his name in the 1950s. He was briefly imprisoned by the Castro regime after the Batista government was overthrown in 1959. His release through private funds brought him safely to the United States where he continued a long academic career at University of Medicine and Dentistry of New Jersey (UMDNJ).

Conclusions: Jose Iglesias was a Cuban urologist who invented the resectoscope that bears his name, After his paid release from a Castro-regime jail, Iglesias had a successful career at UMDNJ teaching decades of grateful residents

Keywords: Iglesias, resectoscope, biography, historical

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For nearly a century, the transurethral resection of the prostate (TURP) has been the gold standard in the surgical management of benign prostatic hyperplasia (BPH). While the treatment of an enlarged prostate has advanced toward other modalities such as photovaporization of the prostate, water vapor therapy, and prostatic implants to open an obstructed prostate, TURP remains a tried-and-true option for many patients with BPH.(1) Over the past few decades, numerous modern advances have attempted to reduce drawbacks such as the risk of complications, performing the procedure in the operating room, and the associated costs of BPH surgical management. Despite all of these technological advances, TURP has remained the gold standard for reducing BPH symptoms, in no small part due to Dr. José J. Iglesias, the inventor of the continuous irrigation 'Iglesias' resectoscope. There is no published biography of the inventor in English, his background, or how his resectoscope was developed. We aimed to elucidate Dr. Iglesias' history to better understand the innovative significance of his contributions to urology.

SOURCES AND METHODS

We conducted interviews with alumni of the University of Medicine and Dentistry of New Jersey (UMDNJ) urology residency training program who worked under Dr. Iglesias in the 1970s. We referenced secondary and contemporary medical publications through the UMDNJ alumni association, the MEDLINE database of the National Library of Medicine (www.ncbi.nlm.nih.gov), the archives of the American Urological Association (AUA), Linthicum, Md., and US Immigration archives via ancestry.com

RESULTS AND DISCUSSION

Innovation. José J. Iglesias de la Torre was born in 1904 Havana, Cuba in a military household. (2) He graduated from and trained at the preeminent University of Havana School of Medicine in 1928 and became interested in the research and therapy of tumors of the bladder and prostate. Practicing at Cuba's Hospital

Nuestra Señora de las Mercedes, he initially worked with the Stern-McCarthy resectoscope which utilized a rack-and-pinion mechanism for transurethral procedures. The working element was mechanically retractable which meant that the surgeon required two hands to operate; one hand held the scope while the other operated the cutting loop.(1) In contrast, Iglesias developed a resectoscope in 1945 that only required one hand, leaving the surgeon's other hand to fine-tune the flow rate, adjust camera settings, and stabilize the scope during the procedure.(2-4) Dr. Iglesias accomplished this by adding a counter force steel spring against the resecting mechanism. This provided tactile sensation and increased stability, allowing the surgeon to more accurately maneuver the resectoscope within their operating field. In his seminal 1948 report in the *Journal of Urology*, figures demonstrate how the instrument is held, and two surgical specimens, one of 150 grams and another of 250 grams, resected transurethrally at one sitting (4) Iglesias enlisted the help of American Cystoscope Manufacturing Inc. (ACMI) to manufacture and market his product, leading to the widespread adoption of the scope we see today. The instrument greatly improved clinical outcomes and Iglesias' surgical skills became legendary. As one of his prior residents Dr. Joseph V. DiTrolio put it, "when he would do a TURP, he would not be done until you could see capsule all around and (made) sure you could drink the water he was irrigating with."(5) As a result, many members of the Batista government and their allies chose Iglesias

as their physician. Even internationally, he was well renowned. As Dr. Patrick N. Ciccone remembers it, "The King of Spain at the time personally flew Iglesias with all of his equipment out to do his TUR there."(6)

Imprisonment. Iglesias was a physician well-regarded by the Batista government in Cuba so when the Castro government rose to power in the 1960s, many members and allies of the previous Batista government were taken hostage, including Iglesias. Like many others, all of his belongings were immediately confiscated and he was thrown in jail, with Castro himself living in Dr. Iglesias' summer home at times.(6)

Soon after his capture, negotiations for Iglesias' release from prison began on his behalf. It became clear that the release would not occur without significant compensation to the Castro regime. The question then became how much would have to be paid to ensure his release. As recounted by numerous residents trained by Dr. Iglesias, his initial words were: "I'm not paying anything. I'm not going anywhere. I like it here in prison. Leave me alone." (5) As time passed, ACMI became involved in the negotiation. As ACMI was a small, family-owned business at the time, this made the plight of even a single associate a pressing issue for the entire company. ACMI had collected all of the royalties on the Iglesias resectoscope and stored them in an account in the United States. Much to the outrage of Iglesias, the company negotiated to turn over all of the cash royalties in order to let Iglesias go.(5) The money from

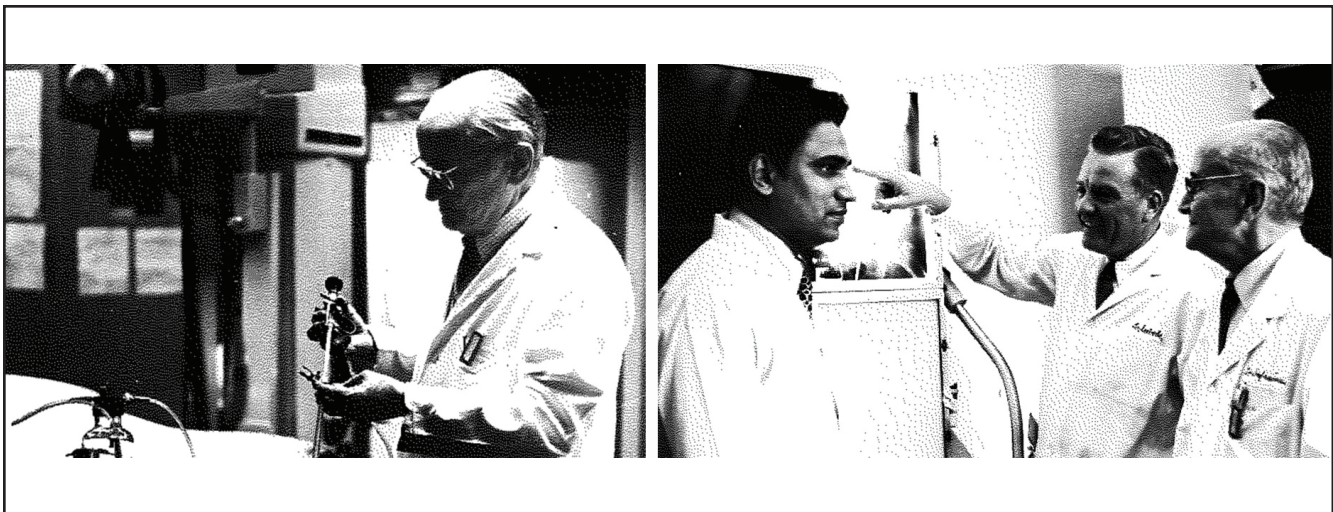


Figure 1. (Left) José J. Iglesias (1904-1979) pondering the instrument that bears his name. (Right) Dr. Iglesias (far right) pictured with Dr. Joseph J. Seebode (then Chief of Urology) and Dr. Madhav Kamat. (Courtesy Rutgers New Jersey Medical School Alumni Association (RNJMSAA))

the royalties was used to pay off Castro personally in order to get Iglesias out of prison. Considering the money paid was a large amount in the 1960s, losing it left Iglesias almost penniless afterward. He would often recount years later that, "It wasn't that bad in prison. I would have never given those bastards the money."⁽⁵⁾

An American Icon. Resilient as ever, Iglesias moved to New Jersey where he started right where he left off with his career in urology. During the 1970s, he became a professor at the University of Medicine and Dentistry of New Jersey (UMDNJ), now known as Rutgers-New Jersey Medical School. It has been hypothesized that this move for Iglesias, who was Catholic, may have been motivated by UMDNJ's prior Catholic affiliation back when it was known as Seton Hall Medical School. The exact reasoning, however, remains unclear. Over the next few years, he would train numerous UMDNJ residents.

In 1972, he and Manuel Ray, the Cuban engineer, gave as a gift to the AUA a prototype of the Iglesias resectoscope at the annual meeting in Washington, D.C. It was there he met representatives from the Karl Storz company which helped in further production of the instrument.⁽²⁾ In that year, Iglesias was also elected to honorary membership in the New York Section of the AUA and donated one of his resectoscopes as a door

prize for the 1974 Ferdinand C. Valentine resident essay contest.⁽⁷⁾ At UMDNJ, he quickly established himself with the largely underprivileged patient population of Newark. Even years after leaving Cuba, many of the patients he used to treat back in Cuba would come back to have their surgeries done by him because of his reputation.⁽⁶⁾ At UMDNJ and the East Orange Veterans Affairs hospital, Iglesias took on an active role in training residents and demonstrated his expertise. "Boss was a superstar," as Dr. DiTrollo recounts, "Iglesias ran a tight ship during his years there. He was very strict on how he wanted things done and his approach was meticulous, as if he was given the instructions for surgery straight from Mount Olympus."⁽⁵⁾ Given the rigor of training, graduates recount leaving the program extremely well-prepared and educated for their own practices.

While working at the University Hospital, a mechanism for continuous irrigation, which was perhaps Iglesias' greatest contribution to improving the resectoscope and related endoscopic procedures, would come to fruition. By engineering a continuous irrigation mechanism into the resectoscope, his invention allowed the surgeon to resect tissue without intermittently stopping to empty the bladder. As Dr. Ciccone recounts, "He and I were the first ones to try this continuous flow concept."⁽⁶⁾ Continuous flow led to lower intravesical pressures and irrigant usage,

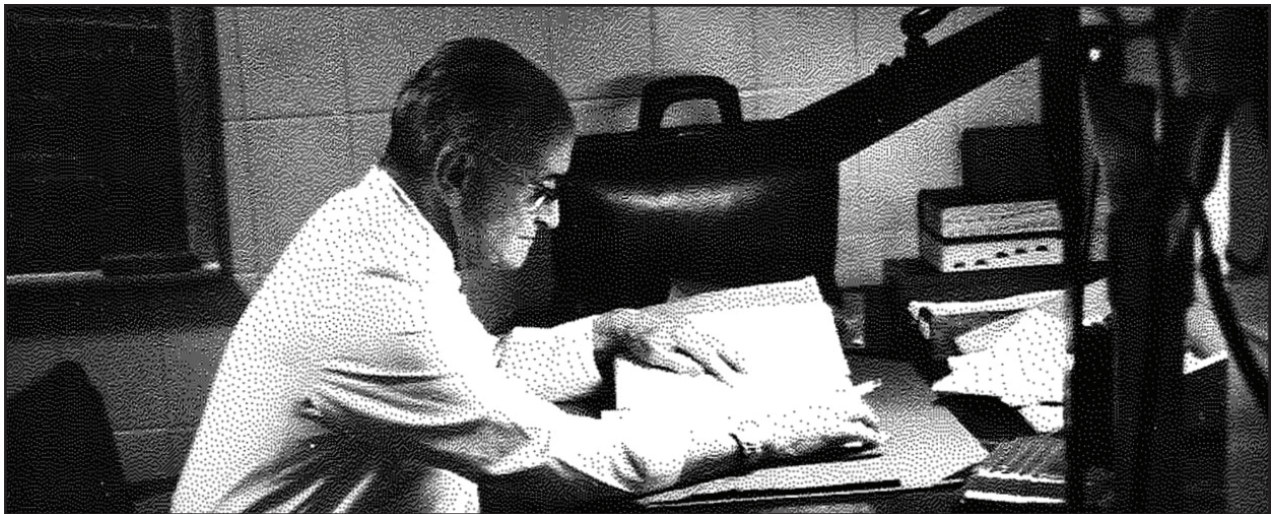


Figure 2. Dr. Iglesias pictured in his study (courtesy RNJMSAA)



Figure 3. Grand Rounds, Department of Urology, with Dr. Iglesias in attendance (2nd from left, 2nd row) (Courtesy RNJMSAA)

thereby reducing the risk of TUR syndrome.(8) Thanks to Iglesias' ingenuity, this mechanism is now found in all modern-day resectoscopes. Jose Iglesias lived to see his invention used and incorporated in urologic clinics, operating rooms, and teaching programs through the world, reaching the age of 75 at the time of his passing in Elizabeth, New Jersey.

CONCLUSIONS

Overall, Dr. Iglesias made multiple contributions to the field of urology with the invention of the Iglesias resectoscope and its utilization of continuous flow irrigation.(9) Even after decades of continued technological advances in the surgical management of BPH, TURP remains the gold standard, in no small part due to the fact that the Iglesias resectoscope revolutionized transurethral prostate treatment. Despite his wrongful political imprisonment and its inherent adverse effects on limiting further contributions to the field, Iglesias' work has made a lasting impact that will continue to benefit future generations of urologists and their patients.

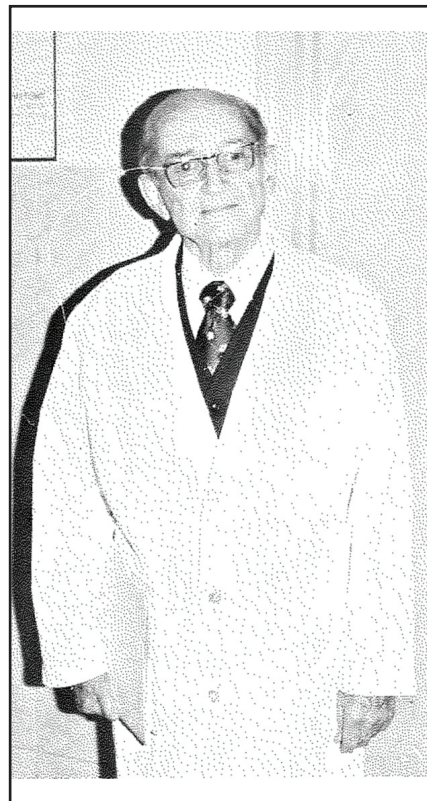


Figure 4. Jose J. Iglesias de La Torre (1904-1979) (Courtesy, RNJMSAA)

Surname IGLESIAS	Given Name JOSE JUAN	Passport Number 17950 I 24
Nationality (Citizenship) CUBAN	Birthplace HABANA, CUBA	Birthdate NOV. 2/1904
United States Address ROBERT CLAY HOTEL MIAMI FLA.		
Permanent Address GENIOS 163 HABANA CUBA		
Visa Issued At HABANA, CUBA	IMM & NAT. SERVICE MIAMI, FLA. 23 ADMITTED MAR 26 1962	
Date Visa Issued MAY 10/1960	STATISTICS HANDWRITTEN ENTRIES MUST BE IN BLOCK CAPITAL LETTERS	
Vessel Name or Airline and Flight No. of Arrival GAM-100		
Passenger Boarded At MEXICO D. F.		
Form I-94 B (Rev. 7-1-57) ARRIVAL-DEPARTURE RECORD		

Figure 5. Admissions document, spring, 1962, for Dr. Jose Iglesias, upon his permanent arrival to the United States, from Cuba, via Mexico, and after his long political imprisonment by the Castro regime (National Archives, Washington, D.C.)

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