

## **HSOA Journal of**

# **Surgery: Current Trends & Innovations**

#### Letter to the Editor

### Pablo Luis Mirizzi

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Pablo Luis Mirizzi was born on January 25, 1893, and died on August 28, 1964, in Córdoba, Argentina. This city, situated in the province of Córdoba within the central-northern region of the nation, served as the locus of his entire life. Founded in 1573, Córdoba possesses a rich Spanish colonial heritage. By the dawn of the 20th century, Córdoba had evolved into a burgeoning urban center, significantly influenced by European immigration. This period was characterized by notable economic and cultural advancement, further augmented by the presence of the venerable National University of Córdoba, established in 1613, predating Harvard University in the United States of America, which was founded in 1636. Throughout the 20th century, Argentina experienced a series of profound political transformations, encompassing conservative, radical, and military administrations. Concomitantly, the nation's economic trajectory exhibited an initial phase of robust growth, succeeded by periods of recurrent crises and instability. It was within this complex historical and political milieu that Mirizzi, a distinguished surgeon, lived and practiced, leaving an indelible legacy to the field of medicine and to his country [1,2].

Mirizzi, born into a modest family typical of Italian immigrants arriving in the Americas, was sponsored by a compatriot, enabling him to pursue medical studies at the University of Córdoba, where he dedicated his life to surgery and teaching, graduating as a physician in 1915. He witnessed the significant mortality associated with post-operative infections, prevalent before the widespread adoption of Listerian aseptic protocols [2,3]. In the ensuing years, amidst the global upheaval of the Spanish Flu pandemic, the Russian Revolution, and the aftermath of the Great War, Mirizzi, with the support of the Córdoba provincial government, traveled to observe leading surgical services and surgeons in the United States and Europe.

In 1918, the University of Córdoba became the epicenter of the University Reform, a student movement that profoundly transformed Latin American higher education. This reform championed principles

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such as university autonomy, student co-governance, and university extension, which subsequently became cornerstones of regional higher education. During this period, Mirizzi declined an offered professorship. At the age of 25, he accepted an appointment as Assistant Professor of Surgery at his alma mater, focusing his efforts on surgical practice [2-4]. In 1926, he achieved the position of Professor of Surgery at the University of Córdoba through a competitive examination. In 1942, he was appointed Director of the Institute of Clinical Surgery in Córdoba. He was named Honorary Professor in 1955, and in 1956, the Argentine Society of Surgeons bestowed upon him the title of Master Surgeon. Mirizzi was renowned for his refined surgical technique, meticulous patient care, and compassionate treatment [2-5].

Mirizzi is distinguished by his significant contributions to surgical practice, most notably his pioneering work in two areas of global renown. Firstly, he introduced intraoperative cholangiography: The inaugural intraoperative cholangiogram was performed in Córdoba in 1931. At a time when biliary surgery was confined to laparotomic cholecystectomy, conducted without the sophisticated amenities of contemporary operating theaters, during an era characterized by rudimentary anesthetic techniques and radiological investigations, devoid of the technological refinement prevalent today, and in the absence of antibiotic therapy, Mirizzi, then 38 years of age, innovated the technique of intraoperative cholangiography. This radiological examination, executed during biliary surgery, provided indirect visualization of the bile ducts for the detection of cholelithiasis, which, until that juncture, could only be definitively diagnosed intraoperatively via surgical exploration of the common bile duct. The resulting image, while reflective of the technological limitations of the period, reveals a rudimentary, yet discernible, depiction of the common bile duct, demonstrating normal caliber, absence of lesions, and limited visualization of the intrahepatic biliary tree. Mirizzi's innovation drew upon the antecedent work of Carnot and Blamoutier in 1921. These authors demonstrated a radiographic visualization of the common bile duct achieved through the instillation of a barium solution. Intraoperative cholangiography, as pioneered by Mirizzi, has revolutionized biliary surgical practice, enabling the precise identification and management of bile duct lesions during operative procedures. Briefly, the technique entails the instillation of a small volume (7-10mL) of iodinated contrast medium via a catheter inserted into the cystic duct. A preliminary radiograph is obtained prior to contrast administration, followed by a second radiograph immediately post-instillation, and a third image after three minutes, facilitating the evaluation of common bile duct emptying. Intraoperative cholangiography maintains its contemporary relevance and clinical utility, even amidst the availability of non-invasive preoperative imaging modalities such as magnetic resonance cholangiopancreatography, particularly in surgical scenarios where previously unsuspected common bile duct lesions or choledocholithiasis are suspected [3-7]. Mirizzi's second enduring legacy is the description of Mirizzi Syndrome: In 1940, amidst the backdrop of the Second World War, he delineated Mirizzi Syndrome, a complication of cholelithiasis characterized by extrinsic compression of the common hepatic duct by an impacted calculus within the cystic duct or gallbladder neck. This syndrome can precipitate biliary

obstruction, inflammation, and other grave sequelae. It is acknowledged that Mirizzi was not the first to document this particular complication of biliary disease. In 1948, Mirizzi published the seminal article that would lend his name to the eponymous clinical syndrome characterized by a gallstone-induced compression of the common hepatic duct, resulting in obstructive jaundice. In that era, Mirizzi Syndrome was frequently an incidental intraoperative discovery. It is pertinent to note that this occurred less than eight decades ago. Currently, Mirizzi Syndrome is often diagnosed through preoperative imaging modalities and may be managed via minimally invasive interventions [2,3].

Mirizzi resided and practiced within a nation marked by a tumultuous political trajectory, during an epoch when even rudimentary analog long-distance telephony posed significant challenges. Though not a war combatant, he navigated the vicissitudes of his time. He operated without the technological infrastructure we now consider commonplace, yet within these constraints, he bequeathed a remarkable medical legacy. He succumbed to acute pulmonary edema, a consequence of chronic heart failure, at his residence [5,6]. In his testamentary dispositions, left a rich cultural collection that included a collection of paintings, sculptures and his personal library to museums and the city of Córdoba itself. Furthermore, he mandated the creation of a foundation dedicated to affording newly qualified physicians the same opportunity he enjoyed in his youth: to engage in international scholarly travel, observing renowned medical services and refining their expertise. The Pablo Luis Mirizzi Foundation persists to this day, fulfilling its mission with fidelity. Mirizzi is buried in the San Jerónimo cemetery, within the family mausoleum in Córdoba [5,6-11].

#### **Contribution**

L.E. Miranda (senior surgeon) was responsible for the conceptualization and supervision of the project, data curation and investigation and was responsible for writing the draft and reviewing and editing it.

#### **Conflict of Interest Statement**

The author has no conflicts of interest to declare.

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#### References

- Romero LA (2002) A History of Argentina in the Twentieth Century. Pennsylvania State University Press, Pennsylvania, USA.
- Leopardi LN, Maddern GJ (2007) Pablo Luis Mirizzi: The man behind the syndrome. ANZ J Surg 77: 1062-1064.
- Beltrán MA (2012) Mirizzi syndrome: History, current knowledge and proposal of a simplified classification. World J Gastroenterol 18: 4639-4650
- Marull AM, Granero LE (2009) Pablo Luis Mirizzi [Pablo Luis Mirizzi]. Acta Gastroenterol Latinoam 39: 177-178.
- Marull AM (2009) Vida y obra de Pablo Mirizzi / Life and work of Pablo Mirizzi. Prensa Med Argent 96: 126-130.
- Mirizzi PL (1893-1964) [Pablo Luis Mirizzi (1893-1964)]. Bull Soc Int Chir 23: 479-481.
- Mirizzi PL (1940) Physiologic sphincter of the hepatic bile duct. Arch Surg 41: 1325-1333.
- 8. Mirizzi LP (1932) Cholangiography during bile duct operations. Communication in the Society of Surgery of Buenos Aires.
- 9. Mirizzi PL (1948) Hepatic duct syndrome. J Int Chir 8: 731-737.
- Mirizzi LP (1939) Physiopathology of the hepatic bile duct. Operative cholangiography. Buenos Aires: El Ateneo.
- Acerbi N (2024) 60 years after the death of Prof. Pablo Luis Mirizzi. Family pantheon in the San Jerónimo Cementery. Rev Fac Cien Med Univ Nac Cordoba 81: 453-457.



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