Historical landmarks of diagnostic and therapeutic laparoscopy in general surgery in Romania

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Department of Surgery, Emergency Clinical Hospital, Bucharest, Romania I would like to address the editor a reminder of some events in the history of laparoscopic surgery in Romania. Recently, we celebrated 30 years since the first laparoscopic cholecystectomy in Romania, performed on the 14th of December 1992, by a Romanian surgical team lead by Prof. S. Duca, Dr. C. Puia, Dr. D. Munteanu and Dr. I. Acalovschi as anesthetist at the Department of Surgery III in Cluj-Napoca. The members of the team had a major role in the pioneering and development of laparoscopic surgery in our country, not only by performing many laparoscopic and diverse procedures, but also setting up the first basic laparoscopic skills course, publishing the first specialty textbooks, scientific articles, organizing the first scientific meetings and the first national laparoscopic surgical society [1,2]. Through their professional performance, teaching and academic activity of the surgical team, the department has become a center of excellence in laparoscopic surgery in our country.

The current era of laparoscopy began with the first laparoscopic cholecystectomies performed by E. Mühe in 1985, through a special trocar, and the gynaecologist Ph. Mouret in 1987, respectively, using video-laparoscopy [3]. This was the start of the "laparoscopic revolution" in general surgery (1989 American College of Surgeons) and of minimally invasive surgery which changed surgical management for ever and which continues to develop.

Related to this historic event, we need to remind a less known fact but of historical importance. In November 1961, at the Emergency Clinical Hospital of Bucharest (ECHB), the first diagnostic laparoscopies were performed in abdominal surgical emergencies in Romania. The initiative belonged to Prof. I. Țurai, head of the Surgery Clinic, at a time when, based on the bibliographic data available, very few surgical services in the world had adopted this diagnostic modality [4]. In the 1950s, in the literature available to us, we found only one paper that also addressed abdominal acute emergencies [5]. In the 1960s, Heselson demonstrated the efficacy and the advantages of diagnostic laparoscopy in abdominal emergencies [4].

The experience gained in our clinic, materialized in the elaboration of two dissertations (doctoral theses). The operations were performed using a "Pergola" laparoscope (modified Kalk laparoscope) with a diameter of 11 mm, illuminated by a quartz fiber rod. The patient was prepared as for laparotomy and sedated intravenously. Pneumoperitoneum was performed by insufflation of atmospheric air with the help of a tensiometer pump, by means of a Palmer needle inserted under local anesthesia (novocaine 1%) in the left iliac fossa. After prior local anesthesia, a supra-umbilical mini-incision was performed, through which the trocar and laparoscope were inserted [6].

The first paper, presented in 1964, belongs to Gh. Popovici, "The value of laparoscopy in acute abdominal syndromes". DL was performed in 134 patients with acute abdomen, requiring 84 laparotomies and 49 cases treated conservatively: 55 acute cholecystites, 15 cholecysto-pancreatites, 30 sealed perforated ulcers, 16 acute pancreatites, 15 abdominal contusions and 6 miscellaneous conditions were diagnosed. "Laparoscopy spared patients from exploratory laparotomy and the risks of general anesthesia" the author states at the end of the paper [2].

The second paper, presented in 1965, belongs to C. Petrescu: "Laparoscopic cholecysto-cholangiography". The author carried out an emergency laparoscopically guided double-contrast pneumo-colecysto-cholangiography in acute cholecystitis and jaundice syndrome. The originality consisted in puncturing the gallbladder followed by

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injection of contrast medium and air (Figure 1); 31 patients had the procedure, and the results were published [2]. The last laparoscopies were performed in 1967. Diagnostic laparoscopy in surgery became less attractive worldwide until the 1980s with the advent of video-laparoscopy and "laparoscopic revolution".



Figure 1.

I would like to mention also that in December 1993, the first laparoscopic cholecystectomies were performed by a Romanian team at ECHB by Dr A.E. Nicolau, Dr D. Venter, Dr M. Florin with Dr R. Florescu and Dr M. Vasilescu, as anesthetists. In our clinic, alongside the elective advanced laparoscopic surgical interventions,

we succeeded in continuing the pioneering work of our predecessors. The experience gained in emergency surgery allowed us to perform laparoscopy in abdominal emergency surgery, traumatic or non-traumatic, to organize training courses, publish articles, textbooks and present our work at national and international scientific meetings [7].

The above-mentioned events prove, once again, that Romanian surgery was and is permanently connected to Europe and world values in material conditions that are often difficult, thanks to the passion, professionalism, and tenacity of Romanian surgeons, and confirm once again, to paraphrase Prof. D. Setlacec, "Romanian surgery - European surgery".

References

- Duca S. Chirurgia laparoscopică viitorul metodei sau metoda viitorului? [Laparoscopic surgery – the future of the method or the method of the future?]. In: Duca S Chirurgia laparoscopică [Laparoscopic surgery]. 2nd ed. Editura Paralela 45, 2001, p. 11-14. Romanian
- Nicolau AE. Momente istorice ale laparoscopiei [Historical landmarks of laparoscopy]. In Nicolau AE. Chirurgie laparoscopică de urgență [Emergency laparoscopic surgery]. Editura C.N.I. Coresi Bucharest, 2004, p. 15-27. Romanian
- Kelley WE Jr. The Evolution of Laparoscopy and the Revolution in Surgery in the Decade of the 1990s. JSLS. 2008:12:351-357.
- Ietto G, Amico F, Pettinato G, Iori V, Carcano G. Laparoscopy in Emergency: Why Not? Advantages of Laparoscopy in Major Emergency: A Review. Life (Basel). 2021;11:917.
- Ruddock JC. Peritoneoscopy: a critical clinical review. Surg Clin North Am. 1957;37:1249-1260.
- Angelescu N, Grama F, Angelescu M. [Historic review of minimally invasive surgery in Romania--a new surgical era]. Chirurgia (Bucur). 2011;106:703-708. Romanian.
- Nicolau AE. The Emergency Hospital Bucharest to the Forefront of the Emergency Laparoscopic Surgery Development. Jurnalul de Chirurgie. 2021;17:99-106.