

CAROL DAVILA UNIVERSITY OF MEDICINE AND PHARMACY, BUCHAREST

DOCTORAL SCHOOL

DOMAIN: MEDICINE



SURGICAL PERSPECTIVES IN TRAUMATOLOGY

Summary of the habilitation thesis

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2024

ABSTRACT

Obtaining the habilitation certificate is evidence of a biography that reflects the stages traveled on the way to an academic career and requires the presentation of a record, documented and conscientiously constructed, of previous experiences in research, education and the entire professional activity.

The habilitation thesis entitled "Surgical Perspectives in Traumatology" summarizes my professional and academic experience and knowledge, including the scientific research I developed after defending my doctoral thesis in 2008.

This habilitation thesis follows the provisions of the Order issued by the Ministry of Education and Scientific Research. It is structured in two main sections, respecting the criteria recommended and approved by the National Council for the Attestation of Diplomas, Diplomas and University Certificates (CNATDCU).

I have paid much attention to trauma surgery throughout my academic and medical career. For me, the academic medical career represents a vocation that requires didactic and communication skills. The development of the trauma management system throughout my career of almost 30 years led me to use my experience to train young students who -completed their studies at the Clinical Emergency Hospital in Bucharest and for the training of countless generations of residents in surgery, emergency surgery, and more.

This habilitation thesis represents the cumulative results of all my academic experience and career-long surgical work. The Hirsch index is 6 in the ISI Web of Science Core Collection source and 8 in the SCOPUS database, while in Google Scholar, it is even higher, at 11.

The scientific publications on which this thesis is based exclude the works published during the Ph.D. Among them, 22 papers are published as lead author and co-author in ISI-indexed journals and 25 in journals indexed in international databases (BDI). This habilitation thesis includes only a part of these works and book chapters related to the chosen topic.

The FIRST SECTION of this habilitation thesis presents the evolutionary description of the candidate's scientific research achievements. This section is structured into several chapters grouped as follows:

The first chapter is dedicated to describing the importance of knowing the history of trauma surgery and how the different approaches to the polytrauma patient are still applied today,

despite the integration of all modern diagnostic techniques and the frequent approach to non-operative management. This history represented a constant concern of mine after the defense of the doctoral thesis. From the beginning of my career, I had the chance to work in a symbolic hospital of Romania, a complex hospital with a complicated history, which celebrates 90 years since its foundation this very year. From somewhere above, Dr. Alexandru Bucur, the reformer of the modern emergency hospital, dedicated his life to the development and operation of our hospital, is watching us as a perfect mechanism.

The second chapter describes our surgery team's contributions in analyzing the factors that contribute to the epidemiology of trauma, comparing the situation in the Bucharest Clinical Emergency Hospital with the existing situation in the world.

The third chapter addresses the management of polytraumatized patients. It includes important stages that start from the prehospital evaluation and end with the final non-operative or operative decision, describing my experience and that of the collective reflected in national or international publications or book chapters dedicated to specialist surgeons, residents or students.

The fourth chapter reflects the personal experience and the Clinic of Surgery regarding the approach of trauma to the pancreas or with a pancreatic component. Several groups of patients who addressed SCUB and to whom different trauma assessment methods and different management strategies were applied, completed with the creation of diagnostic and treatment algorithms, are analyzed here.

The fifth chapter is dedicated to the equally important, although less frequent, experience of trauma to the cavity organs of the digestive tube, with significant morbidity in both adults and children, through road accidents, accidental falls with landing on the abdomen, during the practice of various sports, physical aggression and lately, unfortunately, through explosions (the appearance of the scourge of war). Cavity organ injuries will be produced more frequently by penetrating abdominal trauma and parenchymal organ injuries by contusion trauma.

The SECOND SECTION of this habilitation thesis presents the evolutionary description of academic achievements and scientific research. Throughout my career, I have worked in higher education, where I have trained generations of students and residents in the field of surgery, contributing to developing treatises and manuals dedicated to them. In them and in the notebooks of practical works, I dealt with the part traumatology of parenchymal and cavitary organs and some

procedures useful in daily surgical activity. Resident doctors' theoretical and practical preparation for the specialty exam constituted another important aspect of my activity.

Most of the research activities focused on the field of surgery, mainly traumatology, but also related fields such as cellular and molecular biology, involved in the study of the different types of tumors we face, but also in modern molecular oncological therapies, focusing on ovarian cancer. The scientific research I have participated in so far has resulted in the publication of articles, books, book chapters, and numerous international conferences to share the experience of the most important emergency hospital in the country.

My results have helped increase my visibility and the prestige of the university I represent. This section presents the plans for evolution, development and future research directions that will continue the main theme presented in this habilitation thesis. I want to see if there is a connection between the areas of investigation addressed by the department's collective and the themes of future doctoral theses to establish the directions of specialization and the increase in scientific publications. I will try to improve my teaching methods using the various facilities offered by computer and multimedia systems and develop new practical activities following the latest surgical techniques that can be implemented in trauma surgery.

The third part of this habilitation thesis contains the complete list of bibliographic references used to describe the first two parts.