## People in Medicine

## Doctor Eugénio Côrte-Real

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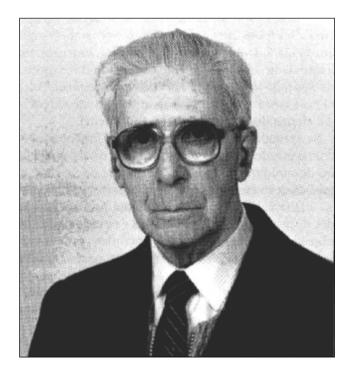
In 1936, Doctor Eugénio Saraiva Côrte-Real concluded his graduation at the Faculty of Medicine of Porto with distinction, starting a brilliant and fruitful career, albeit quiet and discreet, far from the glare of the media promotion which, although prolific and widespread today, was modest or nonexistent at that time.

After a short period as a country doctor, Dr Côrte--Real began his activity as a laboratory worker in 1938, when started work at the Medical Laboratory of Professor Alberto de Aguiar. Professor Aguiar was a senior member, director and owner of the laboratory, located at Rua da Restauração, where, orbiting around his prestige of professor of the Faculty of Medicine and Pharmacy, a group of valuable co-workers gathered (Rocha Pereira and Carlos Ramalhão, among others), served by the latest technical and scientific equipment of the day, even by international standards. The "Medical Laboratory" was more than just a clinical laboratory; it was an active research center; a small Institute, with a large, up-to-date library, a private vivarium and even its own scientific journal, Revista de Semiótica Laboratorial.

As the years passed, the old "lion" of the "Medical Laboratory" and pioneer, among us, of modern laboratory Medicine, grew older, and, at the same time, the malady that had been afflicting him for years became worse. Meanwhile, Dr Côrte-Real had become his son-in-law, and together with his wife, Dr Alda Aguiar Côrte-Real ¾ also a graduate in Medicine ¾ and one of her brothers, Dr Álvaro Aguiar, gradually assumed the key positions in the laboratory, eventually becoming its Director, after the death of his brother-in-law, the victim of a profession-related disease that he had contracted while performing his duties.

It was also in 1938 that Doctor Côrte-Real began his career as a professor, when he started work as an Assistant Professor of the 1st Group of the Faculty of Medicine of Porto, becoming a full professor in the following year, after applying for the entrance exam and gaining first place.

Significantly, the teacher and the laboratory man



never grew apart; they complemented each other in an exemplary, enriching symbiosis.

His first work <sup>3</sup>/<sub>4</sub> Contribuição para o Estudo do Monócito (1936) <sup>3</sup>/<sub>4</sub> already reveals his interest in a type of blood cell that he would study intensely later on in his career, which was dedicated mainly to the study of immunology.

In Velocidade de Sedimentação nos Operados ¾ um Método (1940) he carries out a review of the EDHEM method, which he uses in his study, along with other methods, concluding that it was of little interest, despite the fact that the method was being claimed as excellent by the literature of the time.

Later, he published a series of works that attracted significant interest and broke new ground, on the variations in mineral homeostasis: O Sódio no Sangue (1940), O Potássio Plasmático nos Renais (1940), and Contribuição ao Estudo dos Catiões no Sangue dos Doentes de Addison, (1940).

In 1942, he applied to take a PhD at the Faculty of Medicine of Porto, presenting a thesis entitled Catiões do Sangue, an arduous and ambitious laboratory investigation. When writing the thesis, the author used the most rigorous and precise laboratory techniques, which he carefully selected, to determine the calcium, magnesium, potassium and chlorine, analyzing the interrelations between their quantitative variations through the study of several quotients and parameters, and their statistical interpretations. His conclusions led him to confirm that "the cortical zone of the adrenal gland plays a major role in the maintenance of some elements of vital importance for the preservation of the harmony of the organism – electrolytes, blood hydration, hydrocarbons, etc."

Echoing the already well-known theories of Hans Sellie on "General Adaptation Syndrome" (which would only be definitively formulated by its author in 1947), Dr. Côrte-Real published, in 1945, an interesting work in which he studied one aspect of the Reacção de Alarme e Fórmula Leucocitária. He would later return to this theme about which he was so passionate, as we shall see below, in several studies on the adrenal glands.

In fact, his interest in this organ of the body began with the study of mineral homeostasis, and continued in the field that now became his area of teaching and scientific investigation 34 Histology 34, which enabled him to reveal skills of a morphologist with rare talent and rigorous and objective sense of microscopic observation, always seeking to use the contribution of a morphologist in the clarification of histophysiology. He published the results of his two first observations in this area in 1945; Contribuição para o Estudo da Histofisiologia da Supra-renal, a work that was praised by another renowned researcher of the adrenal gland, Prof Xavier Morato, from Lisbon, who studied cytoplasmic granulations of the cells of the cortical zone, using a wide range of techniques that enabled him to explain some structural aspects of the organ that are of interest to histophysiology.

Meanwhile, in 1945, in collaboration with Prof. António Coimbra, he published Sobre a Intervenção da Glândula Supra-renal, closing this cycle of works with the publication of a study entitled Modificações Gravídicas do Córtex Supra-renal (1947).

For reasons contrary to his will, and completely abandoning the witness of his many years of exemplary teaching activity, and a curriculum of exceptional quality for the scientific environment of the time, the Faculty of Medicine, facing opposition from influential groups, had its hands tied when it should have nurtured and stimulated such a promising career. Doctor Eugénio Côrte-Real, an upright and noble man, opposed to disloyalty and incapable of misleading subjection, found only one way out, which was to hand in his resignation to his secretary, thereby sealing, with the dignity of silence, the tenure of his university career. After a short time, he was offered the opportunity to become a full professor, but Doctor Côrte-Real rejected it due to his seriousness, dignity and coherence, forgoing the coveted chair, and accepting, instead, an uncomfortable pine chair in the austere office of the Analysis Laboratory and Blood Bank of the Hospital Geral de Santo António da Santa Casa da Misericórdia in Porto.

After he had already left the Faculty, he published, in 1956, Método tano-férrico no Estudo do Epitélio Intestinal and Sobre a Topografia das Mitoses no Embrião. This work, which was dense, didactic and beautifully crafted, revealed the histologist's passion for Embryology shedding new light on the mechanism of action of embryo morphogenesis inducers. It seems to stubbornly indicate the direction of a promising and fruitful phase of investigation.

In the area of Laboratory Medicine, he published, between 1948 and 1960, a valuable series of works, all of them calling the attention to the close interrelations between the medical practice and the laboratory.

1961 marked the publication of a work of colossal interest that would become compulsory reading for hematologists and pediatricians: O Hemograma Normal nas Crianças (in collaboration with Alda Aguiar Côrte-Real and Alberto Sá Oliveira). It was an extensive work that aimed to establish statistical values of reference for all the parameters of the blood count in children from birth up to 10 years old, concerning, obviously, the Portuguese population, which made it new, interesting, and added justification to its production.

Meanwhile, Doctor Côrte-Real was actively engaged in the problem of fetal and maternal immunization, and at the Blood Service, in collaboration with the Clinical Analysis Service, he began a routine study of this condition, seeking to diagnose and treat hemolytic disease in newborn infants. At that time, the disease was far more frequent than it is today, since there was no possibility of prophylaxis of rh--immunization - the most severe - with the use of anti-D gamma globulin. The treatment of newborn infants affected by "transfusão-permuta" (exchange--transfusion) (the new, correct and elegant designation that Doctor Côrte-Real used to replace the term "exsanguino-transfusão" (exsanguination transfusion), which was in common use, but was absurd due to the erroneous meaning it implied) became a normal and frequent activity in the Blood Service,

both in fetal and maternal rh and ABO immunization.

Making use of the accumulated material, Doctor Côrte-Real published, in 1966, A Propósito da Doença Hemolítica do Recém-Nascido, in which he reported the experience of the Blood Service and some changes that had enabled, above all, an improvement in the technique of exchange transfusion. This same theme was the object of a book published in 1971, Doença Hemolítica do Recém-Nascido ¾ Rh e ABO, a revision and review of undeniable interest for teaching, based on his by now substantial experience of case studies. It is worth highlighting that for its time, this work was a bold and original initiative, since in Portugal, the Gulbenkian Foundation was practically the only organization that had begun to publish scientific books by Portuguese authors.

Then Doctor Côrte-Real had the idea of making a movie about hemolytic disease, with the aim of disseminating information, not only among Health professionals, but also to the wider public. After a few months, the film was complete: Doença Hemolítica (a 45 minutes film, with sound and color, including two animated sequences); it was didactic in nature, and was based on a clinical case that was appropriately treated and followed-up.

The name of Doctor Côrte-Real is also associated with solving the problem of information for the general public on blood donation and transfusion, which is an imperative condition for the promotion of the benevolent action and the gathering of the required number of donors to meet the lack of blood in hospitals. In the pursuit of this goal, he managed to obtain - here, once again, misunderstood by a few narrow-minded people - two social workers from the Blood Service, who, under his close supervision, began an action of promoting a remarkable and in a certain way, pioneering blood donations campaigns. They began to organize information and teams to collect blood from workers in factories, banks, cultural and recreational associations, barracks, prisons.... (at that time, there was no drug problem to consider...).

In 1972, forced to choose between positions of director of the Clinical Analysis Service and director of the Haemotherapy Service, whose division was decided by senior management, Doctor Côrte-Real, after understandable hesitation, decided to take the position of Director of the Haemotherapy Service (new official designation of the Blood Service).

And now it was the time to materialize the idea

that had haunted him for some time: to gather all the people interested in Haemotherapy in Portugal to extensively discuss the essential problem of obtaining blood to treat patients, in a clear effort to contribute to what seemed to be urgent and inevitable: structuring a National Blood Service, which was, at that time, practically non-existent.

Meanwhile, Doctor Côrte-Real managed to provide the Haemotherapy Service with new facilities, in keeping with the increasing importance of his role. The Service underwent an extensive structural and functional reorganization, including the initial steps of its computerization. In 1974, in a flash of youthful spirit and with an uncommon capacity for study and hard work, Doctor Côrte-Real brilliantly developed an Immunology Sector within the Haemotherapy Service, which increased in importance, ending up with him being invited by the Directors of the Hospital to create the Immunology Center of the Hospital Geral de Santo António. He exercised the directorship of both for a while, but was released from this position at the Haemotherapy Service in order to dedicate himself exclusively to the structuring and development of the Immunology Center, which, gradually, after overcoming some bureaucratic difficulties, became a fully functioning Service.

During this period, he took the initiative of organizing the "Primeiras Jornadas de Imunologia do Hospital Geral de Santo António" (First Symposium of Immunology of the General Hospital of Santo António) (Porto, 1978), which was a remarkable success.

Retiring in 1981, having reached retirement age, Doctor Côrte-Real, contrary to social conventions, in which one cannot always distinguish deceit from authenticity, declined the traditional homage and farewell dinner that hospitals usually offer to celebrate the "civil burial" of those reaching the end of their careers — whether great workers whose work has had enormous consequences, or ordinary employees, when not harmful. He was, in fact, still very lucid and active: he continued to support and collaborate with the Immunology Service he had created; he never stopped studying and keeping himself up-to-date, and, having plenty of time to spare, which he could now manage without the pressure of tight schedules to comply with, he began to dedicate himself once again to his other great passion, painting, which would progressively absorb him more and more, becoming his exclusive activity, almost to the point

of obsession, in a race against time – which was now was becoming short – and blindness, which he knew was close.

Now almost blind, Doctor Côrte-Real, a man of action, intelligence and sensitivity, found himself drastically limited and forced into inactivity. It is then that he decided to take a Braille course, and since he could no longer paint, he produced a few poems of undeniable grace and beauty, without literary pretensions, but pulsating with life and sensitivity, just like their author.

An austere man, reserved in speech, he was always concerned with a permanent criterion of justice, which was informed by his dimension as a man of good, with a solid moral background. He never used the easy and usual ruse of identifying himself with the Service he directed, or took personal offense when something that was denied to the Service. He was not the Service, the Service was part of the Hospital. This enabled him to always place the general interests of the Hospital - as an institution serving the community - above the limited interests of his own Service, despite their importance. This rare and superior vision of what a Hospital is, reflecting in an intelligent and globalizing vision of the institution in its complex whole, resulted in the "prize" - as is sadly all too common - of often being considered naive and outdated, in his legitimate aspirations as director and head of a Service, and seeing his most evident and limiting demands postponed or deprecated in favor of others.

Seeking to affirm himself through the dedicated and coherent exercise of his professional activity, he was the last person to indulge in self-promotion; and I have to admit that in this aspect, he lacked talent. He always put himself on the line and took full responsibility for the initiatives he proposed, and which, as a rule, he successfully concluded; but always driven by the hallmark of service to the institution and the community.

He never responded to mediocrity with mediocrity – which he tried hard to ignore; not out of pride, but because he believed with a clear conscience that it was right to act with correctness.

He was a great man, a legend of Medicine and a brilliant server of the Hospital Geral de Santo António, to which he dedicated, over a quarter of a century, all his enormous potential, constructing a remarkable work, through continual determination, quiet, daily effort, notable intelligence, and a humility possible only in a superior man, guided by a scientific and medical background that was continually being updated and renewed, and was therefore undeniably modern.

By remembering the image of Doctor Côrte-Real in these pages, I portray a fertile example and exalt a life's journey.

Doctor Eugénio Saraiva Côrte-Real died on March 2<sup>nd</sup> 1996, at peace with God and mankind. ■