DOCTOR ANTONIO ALFARO’S NOTES IN THE TREATY BY DESAULT AND BICHAT. FIRST UROLOGICAL WORK IN SPANISH IN THE XIX CENTURY


Summary.- OBJECTIVES: We performed a study on the notes made by doctor Antonio Alfaro to the book by Bichat and Desault “Treaty of urinary tract diseases”.

RESULTS: Such notes are altogether more extensive than the work they accompany. In them we see the knowledge about the treatment of urinary tract diseases in the beginning of the XIX century had a great level and, at least, similar to that of other European countries. The notes are accompanied by multiple references to surgeons of various times, and publications of that time. All them conform a real Urology text with its own personality.

CONCLUSIONS: Dr. Antonio Alfaro must be among the Spanish urological medical literature authors of the 19th Century.

Keywords: Antonio Alfaro. Urology nineteenth century. History of Urology.

Resumen.- OBJETIVO: Realizamos el estudio de las anotaciones que hace el Doctor Antonio Alfaro, a la obra de Bichat y Desault “Tratado de las enfermedades de las vías urinarias”.

RESULTADO: Dichas anotaciones son en conjunto más extensas que la obra a la que acompañan. En ellas se aprecia que los conocimientos en el tratamiento de enfermedades de aparato urinario, eran, a principios de siglo XIX, de gran nivel y al menos semejante al existente en otros países Europeos. Las anotaciones van acompañadas de multitud de referencias de cirujanos de diversas épocas, y a publicaciones del momento. Todo ello conforma un autentico texto de Urología con personalidad propia.

CONCLUSIONES: D. Antonio Alfaro debe formar parte de los autores de literatura médica urológica española, del siglo XIX.

Palabras clave: Antonio Alfaro. Urología siglo XIX. Historia de la Urología.
INTRODUCTION

The beginning of the nineteenth century in the Spanish cultural and scientific world could not be more daunting, and particularly if there is a year that marks this trend is just 1805. In that year and in the midst of a Europe at war, takes place the battle of Trafalgar. Centers of medical knowledge and surgical, that shine in the early nineteenth century in Spain, highlights the Royal College of Surgeons of Navy Cadiz. In 1711 John Lacomba, Surgeon Major of the Army, created within the military hospital in Cadiz, a “Anatomical Amphitheater” and a “School of Practitioners of Surgery of the Navy” (1). In 1725, the siege of Gibraltar, coincides with a surgeon of the Army Staff, D. Pedro Virgili, and between them, so calm made a genuine renewal of Spanish medical and surgical knowledge, creating in 1748 the “Royal College of Surgery of the Navy”.

They get an achievement unparalleled administrative, which is to unify the titles in Medicine and surgery. This is of great international significance and extends through France and across Europe. As part of the Royal College of Surgery of the Navy, we found a series of figures with certain contributions to the treatment of urinary diseases, among which are Bartolome Francisco Calero and Torres, and Diego Rodriguez del Pino, who describe their techniques for hydrocele treatment, Jose Ramos Carraquilla, who ran track for urinary hypogastric; Gomez de Espinosa and Luis Montero, who make contributions in his lectures about circumcision and the lithotomy. Leading figure in the school and related to Urology is Francisco de Canivell (3,4), which know their skill and art in the lithotomy through his pupil Francisco Villaverde in his “theoretical practical course of surgical operations” work of 1780, and its “Comments” at the Literary Friendly Assembly of the Royal College of Cadiz between 1762 and 1788. Canivell has held since February 8, 1769 until his death, the office of Surgeon-Major. In addition to his scientific contributions (4), maintained the privileges and discipline of the school and took care of the normative aspects of medical practice surgical. It was in this place and with Canivell Francisco, where trained professionally our character, Antonio Alfaro.

DESCRIPTION OF THE WORK AND ANNOTATIONS

The work printed in Castilian appears with the following title on its front page: A Treatise on diseases of the urinary tract by P. J. Desault, chief surgeon at the Great Hospice of Mankind in Paris. Work extracted from the diary of surgery increased and published by Xavier Bichat. In Paris Year VII of the French Republic. Castilian translated with notes by Dr. Don Antonio Alfaro Assistant Embarkation of the Royal Navy” (6) (Figure 1). Prints by D. Joseph Bent, in Madrid, in the year 1805, and is written by Antonio Alfaro and the heading says that he adds “Notes”.

Begin with what he calls “speech translator,” which covers a total of five pages, which is named in admiration, to Canivell “has not many years, Spain lost the worthy Canivell with which all physicians consulted of Cadiz and the surrounding towns where most arduous ... “.

The notes follow the order of the work of Desaut and Bichat. These notes on many pages have greater extent than Desaut own work (Figures 2 and 3), and in most cases extensive data provided in the original work. They are printed in a smaller font so that together, the amount of text that make the annotations is superior to the original work that accompanies it.

The treatise is divided into two parts: the first refers to the secretion of urine in this part including a chapter on diabetes, one on the suppression of urine, one on the depravities of the urine (urine bloody,

TRATADO DE LAS ENFERMEDADES DE LAS VIAS URINARIAS,
POR P. J. DESAULT,
CIRUJANO EN XIFE DEL GRAN HOSPIcio DE HUMANIDAD DE PARIS.
OBRA EXTRACTADA DEL DIARIO DE CIRUGIA: AUMENTADA Y PUBLICADA
POR XAVIER BICHAT
EN PARIS AÑO XII DE LA REPUBLICA FRANCESA
TRADUCIDA AL CASTELLANO CON NOTAS
POR EL DOCTOR DON ANTONIO ALFARO, Ayudante de Embargo de la Real Armada.

3-2.
MADRID.
EN LA OFICINA DE DON JOSEF DOSLADO. Año de 1805.

Se hallará en Cádiz, en la librería de Don Vicentiano Pájaro, calle Ancha, junto las Rencadas.

Figure 1. Home page, author, publisher, year of publication.
DOCTOR ANTONIO ALFARO’s NOTES IN THE TREATY BY DESAULT AND BICHAT

The second part deals with diseases related to the excretion of urine, with chapters on urinary incontinence and urinary retention. The latter is the most comprehensive and ranges from 107 to page 376 (ibid. Pg 383-386).

The following excerpt from the “notes” those fragments most important: in the diagnosis of different types of diabetes (ibid. Pg 4) “... Sidenhan the observed (diabetes) to daily fevers consequence ...”. He comments on the evolution of renal stab and gunshot advising conservative treatment (ibid. Pg 44) “... The wounds of swords and firearms of interest to the kidneys ... supuraron long time and have healed the sick. “Referring to make notes ureteral lithiasis accurate from the standpoint of anatomical and pathological (ibid. Pg 75) “... The small curvatures that make up the ureters in extent ...” (ibid. Pg 77) “... the small ureteral stone precedes large, and works together ...

In various places in the “Annotations” says data on personal practice in various processes and interventions on the urinary system, and referring to the lithotomy (ibid. Pg. 88-89) “... the recognition done many times by the probe, which is the surest way...” “... are unfortunately this operation (the lithotomy), even if made by hand more skilful in carving ...”. Speaks at length of catheterization, various types of probes, and cathkins, shape and materials of construction (ibid. Pg 93, Pg 278) “... we have the help of the cathkins and elastic probes of Bernard...” as well as for probing different tricks, and notes that it is best to learn to practice on cadavers (ibid. Pg 298): “...do it first on cadavers...”.

In the notes referred to the diagnosis and treatment of acute urinary retention, describing the distended bladder (ibid. Pg 116) “...ipogastrio elevation and tension...” and the digital rectal examination as a way to confirm the diagnosis: (ibid. Pg 120). The therapeutic approach in this situation: (ibid. Pg 122): “...The practice of probing, patience, and the choice of probes or so thick and CORBAS, or finally at the address given in the channel are the means to overcome the obstacles presented...”. In (ibid. Pg 126) explains how the trick probe with practical help with digital rectal examination. Regarding the usefulness of digital rectal examination noted below

Figure 2. Page 152: very extensive annotations, in a font smaller, and far exceeding the length of the original work.

Figure 3. Page 163: extensive annotations. On this page speaks of the bladder hernia.
other applications in the diagnosis of prostate disease (ibid. Pg 258): "...distinguished by touch varicose veins of the gland (prostate) or their membranes..." (ibid. Pg 189): improving the diagnosis of bladder fungus (tumors) with digital rectal examination. Notes that (ibid. Pg 246): "...to explore the prostate is the probe first and then digital rectal examination...". In (ibid. Pg 248) says that the catheter is difficult in patients with prostate diseases.

In the suprapubic puncture of the bladder when a catheter must be left, refers to the system for spare parts in the suprapubic catheter and placed (ibid. Pg 358-362) "... introduced a dagger with a small button at the top reintroduces ... serving the stylus driver, to the best introduction of the probe ... ". Also in the perineum bladder puncture, expose details about how it is done (ibid. Pg 365-366): "... like a size ...", including details of his personal experience "... made the incision, as the bladder is in a state of extension ... is easily distinguished by compressing the finger at the bottom of the wound ... "(ibid. Pg 366), and advice to "... young surgeons ... ". In (ibid. Pg 368) described the drainage of the bladder through the rectum. In the woman is described (ibid. Pg 370) through the vagina, advising a special bandage that must be "... T ..."). Notes that the placement of a catheter in the bladder forces that (ibid. Pg 252): "... there will be a surgeon to open the probe ... ".

Make a number of comments about hernias of the bladder, saying that is the worst cause of urinary retention (Figure 3).

In the section on "urinary retention by tumours of the walls of the urethra" explains his opinion about the use of caustic saying, "... if the caustic is enough to destroy these hardships, so will be the use of only the probes enough, without causing damage of that."(ibid. Pg 278).

In point of gangrene, make notes about a picture at all similar to Fournier's gangrene requiring (ibid. Pg 253): "... drainage of pus from the perineum as the size ..." advising about how to treat it (ibid. Pg 321) "... leaving open the urethra and surrounding parts ... ".

Describes the retention of urine in women by cystocele and / or prolapse of womb (ibid. Pg 168), and rectal prolapse (ibid. Pg 171-172). It also makes an accurate description of vesico-vaginal fistula by labor (ibid. Pg 339), saying that it is "... incurable ...".

Throughout all the text that makes up the "notes", there are many references to authors of urological, surgical and medical of the eighteenth century and earlier. Also various scientific publications are cited. All these references are independent of those in the work of Bichat Desault, and are very large ones, are interspersed throughout the text, then the sentence or paragraph that is based on the quote that says our author. Are detailed in Annex I.

**DISCUSSION**

The annotations D. Antonio Alfaro made to the work of Bichat and Desault, make for themselves a text of urology, in which you can see many aspects of the state of knowledge of diseases of the urinary tract of the surgeons of the Royal College of Surgery of the Navy Cadiz in the early nineteenth century, formed around figures like Francisco de Canivell; group of highly regarded professionals in the medical practice in Spain in the late eighteenth and early nineteenth centuries 3.

The Treaty of Bichat and Desault is a well-known work, translated into several languages and widely distributed throughout Europe at the beginning of the nineteenth century. Without delving into the personalities of Desault and Bichat should remember that it is a work extracted by the same surgical journal Bichat Desault prepared by the Hotel Dieu, as Bichat's own words in this diary is" many observations and few reflections" thus being the work of Bichat very consistent with the principles of the French encyclopedia, to gather "... these observations and reflections on a table ... " methodical. The presence of two separate ways reflects the authors that surgery and medicine, until this time had been. The surgery, performed by practitioners, people with limited theoretical, focusing on the implementation of the surgical technique they know, and medicine in the hands of professionals with extensive scientific training, increased social recognition, and higher university degree.

Antonio Alfaro shows us in his notes that this dichotomy was gone, at least in a group of Spanish surgeons at the beginning of the nineteenth century. And so struck by his broad scientific background, which is well illustrated in the extensive list of authors and publications, referred to in his notes. We can find references to European authors such eighteenth-century literature refers to the practice of lithotomy: Collot, Cheselden, Le Dran, Chopart (Annex 1).

The practical experience of the surgeon also part of the knowledge base of our character. In his notes full of references to knowledge that can only
be bought on the basis of experience, as well as opinions about diseases and procedures that are only achievable through practice and direct contact with the patient. Available resources, both theoretical and practical to do as your doctor, is considered by our author most useful, and specifically states so in his notes: Pg 6 “... which soon ended in gangrene ... and the (medical) is only a spectator of this misfortune, he can not help, because he lacks the knowledge to do so. Not so for teachers who are educated in the royal schools of Madrid, Cadiz and Barcelona. “6. The annotations of Antonio Alfaro we are finding evidence that the professional training in medicine began to be in the early nineteenth century, medical surgical areas encompassing theoretical and practical skills, and although this was not the norm across the country the right way was already mentioned.

Afterwards draws the attention of the reader, the amount of detail surgeon urologist practical insights and advice with sound eminently practical, which plague the “Annotations”. This aspect, as in other works in the urologic literature is lacking in the work of Antonio Alfaro is widely developed. They are so fine detail and quality assessment, some of them are applicable at any time in urological practice, for instance when he notes (ibid. Pg 93): “… civet should be experienced as a tube and a thin tube and the patient is less exposed to to you make a false path. “, or when digital rectal examination as recommended way to help make the complicated bladder catheterization (ibid. Pg 126), also saying that the digital rectal examination is more useful, and is as essential at the time of diagnosis of urinary tract diseases. Reading these technical details, see in them the ancestor of the “tricks of the expert” as currently booming in courses and conferences.

Our author had a wide knowledge and experience of his own in any case at that time were known to drain acute retention of urine: and so describes the suprapubic tract, perineal and transrectal. And it demonstrates a practical approach achievable only through the realization of the techniques described, being noted his description of the distended bladder (ibid. Pg 116) “... ipogastroic elevation and tension ...” giving the advice that the digital rectal examination is the best way to diagnose a distended bladder (ibid. Pg 120).

It’s striking description of the technical parts of the suprapubic tube in place as using a stylus to guide the replacement: (ibid. Pg 358-362) “... introduces a stylus with a small button on top ... is re-enter (the probe) serving the stylus driver, to the best introduction of the probe ... “. Practices are not only descriptions but also full of great sensitivity in order to minimize the suffering of the patient, as is the placement of a button on the stylus tip is to avoid the pain that may cause the tip of it, when it touches the wall posterior of the bladder. The refilling catheters and probes on a surety or guide is a procedure that remains today.

Author demonstrates our anatomical knowledge applied to the urinary system, which must have acquired by performing dissections and autopsies on cadavers perhaps with diseases of the urinary tract, thus describing the tortuosity of the ureter and that points of detail relating to ureteral stone above the large to small (ibid. Pg 77), they suggest. The anatomical dissections amphitheater was built by John Lacomba, was used and exploited by those who were trained there, as did our character.

Our author informs us about the low level of knowledge of diseases of the urinary system existing at this time in our country, and is based on this fact, which justifies the publication of his work. This situation is striking in a country, in which two centuries before Francisco Diaz published his urology treatise. This work was not followed by a school to continue in the study of diseases of the urinary tract.

They point out the references in various parts of the annotations, about teaching. On the one hand he explains how learned his profession, and on the other hand talks about as to teach doctors in training that want to learn. He speaks about his master Canivell, and about the practice on cadavers, gives advice on how to learn surgical techniques in this regard points out, among other things, that to learn to make bladder catheterization need practice first on cadaver (6) (Pg . 298). It follows from these comments, how much he appreciated what he had learned as a student, and thought that teaching was a key to care.

How could it be otherwise, in these notes is heartfelt words of affection and admiration for who was the more relevant figure of urology at the time: ... Francisco de Canivell that “there is still many years, lost to Spain to worthy Canivell which consulted all the doctors of Cadiz and the surrounding towns where most arduous ... “. Noted later that he learned his work as a urologist at the same Canivell (ibid. Pg 251): “… I have often seen my worthy master Canivell, at the Royal Hospital in Cadiz, with knowledge and courage to overcome the major obstacles of the channel ... “. It may be a coincidence but the work we studied is printed by D. Joseph Doblado, in Madrid, in the year 1805, being the press, which was commissioned in the year 1785, to print the works of Francisco Canivell (5).
The Royal College of Surgery of the Navy in Cadiz, about the outstanding figure of Canivell Francisco, was created in the late eighteenth century, a school of surgeons experienced in the treatment of diseases of the urinary system, which was part of our author, and that opened the doors to the development of urology in the nineteenth century Spain (1, 3, 4).

Throughout the notes is a brief clinical note: speaking of a case personally attended “... a patient in the island of Leon ...” nowadays San Fernando in Cadiz, which cast out of a stone the size of a date 6 (Pg 54).

Enter our author, in the discussion of venereal disease, which so aroused great interest in the centuries after the colonization of America. Since this is a Navy doctor, “Assistant Embarkation,” and as in those years was the subject of debate the American origin of these diseases can not be otherwise than of his opinion (ibid. Pg 211 -212), widely spoken source, pointing out that Columbus brought them, citing a number of authors to support their data (ibid. Pg 213-219). He also speaks of the mode of transmission (ibid. Pg 223), noting that gonorrhea is spread through the urethra, semen flows not, and that the virus causes. As with all issues addressed in his “Annotations”, mixing a wide medical culture based on this reviewer, with practical aspects that clearly state their personal professional experience.

We can not end the discussion without making some comments about what our author calls “gangrene”, which corresponds in part to what is now known as Fournier’s gangrene. Particularly striking is the clarity with which our author points out the correct treatment (ibid. Pg 253): “… drainage of pus from the perineum as the size … leaving open the urethra and surrounding parts …”. It should be noted that the description of Jean Alfred Fournier (1832-1914) took place three decades after the description accurate and correct therapeutic approach of Antonio Alfaro.

The extensive theoretical and practical training which demonstrates Antonio Alfaro in the diagnosis and treatment of diseases of the urinary and embodied in his “notes” has not gone completely unnoticed to date, as D. Antonio Bahia, in his Dictionary of Medicine and Surgery, 1807, in volume six, referring to the work of Desault, states that “… translated into Castillian is very timely with notes by Don Antonio Alfaro, where we refer … “ (7).

CONCLUSIONS

The Annotations that Antonio Alfaro performing to the work of Bichat Desault, make up a urological text in its own.

It can see the state of knowledge of diseases of the urinary system in Spain in the early nineteenth century, and how they were the doctors who treated these diseases, at least at the Royal College of Surgery of the Navy Cadiz.

We believe that D. Antonio Alfaro should be part of the authors of the nineteenth century urologic literature in Spanish.

ANNEX I :Quotes from authors and texts, made by Antonio Alfaro in his “Notes”.

Pg 1: Cullen
Pg 6: Roll Doctor, Professor Gregori, Home, Hope
Pg 7: Fretéo, Biliary, Mead, Home, Cullen, Rollo, Dobsom.
Pg 9: Rutherforod
Pg 12: Mead, Dureto, Berger, Tourtelle
Pg 13: Obson, Ruyscho,
Pg 27: Cullen
Pg 48: Ledran
Pg 50: Goodrich, Dechamps
Pg 51: Cavillard, Litre and Alexander Monro
Pg 53: Fourcroy, and Vauquelin (his disciple).
Pg 60: Morand.
Pg 61: Colot
Pg 67: DeChamp, Roche (encyclopedia surgery).
Pg.74: Litre, Boerhaave.
Pg. 84: Chopart, Dechamp.
Pg 85: Tolet.
Pg 93: Paulo Gineta, the two Fabricios and Matching.
Pg 96: Cesselden.
Pg 120: Ledran.
Pg 145: Mead. Hermann
Pg 146: Roberto Uit.
Pg 148: Japanese and Chinese medicine called oYT Chinese doctor.
Pg 156: Rusworth (Northampton surgeon); Amyand and Duglas (Surgeons in London), M. Sipton (English surgeon). Pringle.
Pg 156: Test date of surgery in Edinburgh.
Pg 167: Portal and Hoin
Pg 163: Levret
Pg 169: Roonhuisen, Meckreen
Pg 171: Gooch T bandage, Bernard (stating that “… applies the rubber band …”).
Pg 175: Bichat, Balde Toeque, Mauriceau Rodino
Guillemeau, Chamberlain, Chaxman, Semllie, Deventer de la Motte, Levret, Hunter.
Pg 181: Proceedings of the Royal Academy of Sciences of Year 1748.
Pg 194: Dr. Pallas. ; Perey (in a lecture to the Royal Academy of Sciences).
Pg 197: Hunter Bell, Pott.
Pg 201: Licitaud, Cullen, Diversions of Rochefort.
Pg 211. Grunez: Greek authors speak of gonorrhea.
Pg 212: Hunter.
Pg 213: Morgagni, Hunter, Swediaur, Bell.
Pg 214: Alyon, Boybeau, Swediaur
Pg 216: Swediaur.
Pg 226: Hunter, Berlinghiceri (treated for sexually transmitted diseases) Alyon.
Pg 321: Swediaur.
Pg 264: Ruischio.
Pg 265: Chopart.
Pg 282: Bell, Sabatier (operative surgery), Roche Petit Radel.
Pg 274: Bell, Sabatier (operative surgery), Roche Petit Radel.
Pg 277: Hunter.
Pg 282: Celsus, Galen, Paul Aeginetan, Avenzoar, Averroes, Albucasis.
Pg 283: Hunter Bell.
Pg 284: Bernard. (... Rubber band ...)
Pg 295: Morgagni, Hunter Bell, Berlinghiris, Boyveau.
Pg 317: Ledran.
Pg 324: Cullen, Fourcroy
Pg 326: Dr. Dobson (doctor of Liverpool). Percebal Pot, Priest Law, Hulme, Douey
Pg 328: Chopart.
Pg 349: Daran.
Pg 352: Hunter (their catkins) Daran and Sharp.
Pg 368: Hamilton (said to be the author who first described the puncture of the bladder from the rectum, arousing controversy this technique).
Pg 369: Fleurant, Pouteau. First volume of the memoirs of the medical society of London. Medical Communications Officer

REFERENCES AND RECOMMENDED READINGS
(*of special interest, **of outstanding interest)

*5. D. Francisco Canivell. Tratado de vendages y apotos para el uso de los reales colegios de cirugía ilustrado con diez laminas en que se manifiestan los apotos necesarios a cada operación, tanto separados, como aplicados con sus correspondientes vendages para la mas facil inteligencia de los principiantes. Madrid, 1785.