ORIGINAL ARTICLE: HISTORY OF MEDICINE

Giovanni Battista Palletta (1748-1832), precursor of modern surgery in Milan

Claudia Biraghi, Renzo Dionigi

International Research Center for Local Histories and Cultural Diversities, University of Insubria, Varese, Italy

Abstract. This concise biography of Giovanni Battista Palletta shows how, between eighteenth and nineteenth centuries, he was among the first to trace the path of modern surgery by turning it from an empirical ability to an effective medical treatment. The article provides an overview of his clinical activity at the Ospedale Maggiore in Milan, of his scientific production and of his relationships with other eminent Italian surgeons of his times, namely Antonio Scarpa and Giovanni Alessandro Brambilla.

Key words: Italy, Milan, surgery, Giovanni Battista Palletta, Ospedale Maggiore, Antonio Scarpa, Giovanni Alessandro Brambilla

Introduction

In the first decades of the eighteenth century, the surgery practised in Milan – mainly in the Ospedale Maggiore, or Grande Spedale Civile di Milano – was confined to a few, though relatively demanding operations: some rare amputations, ligatures of hernias, lithotomies for vesical calculosis and procedures to treat cataracts. It was an empirical surgery, elsewhere practised by barbers.

A significant change occurred around the mideighteenth century when the Mantuan surgeon and obstetrician Bernardino Moscati (1705-1798) arrived from Pisa to Milan. Appointed as *incisore anatomico* and chief surgeon by the Hospital Chapter, he also founded a proper surgical school. His son and student Pietro was the first to hold the chair of Surgery, set up by the *Magistrato Generale degli Studi* and relying on the Ospedale Maggiore.

In this period, the Ospedale Maggiore, together with the other medical schools in Milan, had very close relationships with the University of Pavia, both similarly committed to make up for their serious cultural backwardness with regard to other European institutions of higher learning. By the end of the century, the Ospedale Maggiore could reach a capacity of 3,000 patients in case of emergency, and its surgical school had gained great prestige, benefiting from the presence of a specific room, named *brugna*, to practice human cadaveric dissection.

In the same years, another Lombard surgeon, Giovanni Alessandro Brambilla (1728-1800), rose to a great fame within the Austrian army and the imperial court of Vienna. A strong supporter of the superior efficacy of surgery compared with medicine, Brambilla illustrated many surgical instruments and their utilization in his most renowned work, the *Instrumentarium chirurgicum militare Austriacum*, published in German (1780) and Latin (1782).

This is a brief outline of the scientific, educational and training background of Giovanni Battista Palletta (Fig. 1), a student of Pietro Moscati's school and a habitual correspondent of Brambilla. Palletta was among the first to trace the path of modern surgery by taking the discoveries about the structure of tissues and organs, and the results obtained from experimental



Figure 1. Portrait of Giovanni Battista Palletta (Domodossola, Civico Museo di Palazzo Silva and historical archives of the Fondazione Gian Giacomo Galletti del Comune di Domodossola).

surgery as the basis for his work. He had a main role in turning surgery from an empirical ability to an effective medical treatment.

Despite this, up to recent times, Palletta's conspicuous activity as clinician, researcher and professor received only some superficial and episodic attention in published works. Lately, a comprehensive biography has been published by Dionigi (1).

The academic background

Giovanni Battista Palletta was born in Montecrestese (Italy) on April 18, 1748, the firstborn of Giacomo Palletta and Domenica Leonardi. After some rigorous studies at the Kollegium Spiritus Sanctus, a Jesuit college in Briga (Valais, Switzerland), Palletta decided to go to Milan. Here, the opportunities of teaching and research were very rich: in particular, the University of the Jesuits in Brera outclassed that

of Pavia for importance and number of students, even though for the chairs of Philosophy and Theology only. After trying some law studies, Palletta's choice eventually fell upon the school of the Ospedale Maggiore, seat of the Palatine School for the two chairs of "Anatomy" and "Surgery, obstetrics and chemistry" (2). On October 24, 1763 he entered the *Collegio-Convitto degli Allievi Chirurghi*, at the Ca' Granda (3), as a student of surgery, a profession that might have appealed to him for its operative aspects and social implications (4). At the Milan school, Palletta could benefit from the anatomical dissection exercise and the hospital practice that were an essential background for a young surgeon (5-7).

In 1770, Palletta moved to Padua to register in the "Philosophy and medicine" school. Some biographers state that in Padua he wished to attend the lessons of Giovanni Battista Morgagni, internationally renowned professor of theoretical medicine, who unfortunately died on December 5, 1771. However, it is more likely that Palletta's preference for this university relied on his interest for philosophy as well as for surgery.

The Archivio Storico of the University of Padua holds three documents attesting the presence of Palletta. The first one, signed by Professor Giovanni Marsili, states: «Testor et jure jurando affirmo, Dominum Joannem Baptistam Palletti de Monte Crestisio, Helvetium, fidelibus de origine et domicilio prolatis documentis, inclytae nationi germanicæ D.D. artistarum fuisse legitime adscriptum». The document, rather puzzlingly, describes Palletta as "Helvetium", that is Swiss, although he was born in the Piedmont province of Ossola. This designation is repeatedly confirmed in all the other documents, including the publicum doctoratus privilegium that confers the university degree on Palletta: «Sic itaque summa cum laude, et honore ingenti praeclarissimus et excellentissimus D. Joannes Baptista Palletti helvetius ad summum doctoratus apicem philosophiae et medicinae Deo favente pervenit» (Fig. 2). The term "Swiss" attributed to a subject of the Duchy of Savoy, as well as the expressions "nationi germanicæ" and "artistarum", can find an explanation by considering some peculiarities of the Paduan University. Since the fourteenth century, two different divisions, named after their specific disciplines, formed the University of Padua: the università leggista, devoted to

law studies, and the *università* artista, including philosophical, theological and – precisely – medical studies. The students of each *università* were split up into *nationes*, or "nations", having the right to elect a councillor each. The "nation" with greater privileges was the *alemanna*, or *germanica*, enrolling the several students who came to the renowned university of Padua not only from Germany, but also from other Germanspeaking countries, among which Switzerland.

Palletta was certainly Italian, or *italus* (as he is defined in his certificate from the college of Briga), but he came from an area near the Valais, even sometimes under the control of this Swiss canton. It is also likely that he presented, among his credentials, his college diploma, obtained after ten years of severe studies in the German-speaking Briga. All this considered, therefore, we can understand why he was registered as *helvetius* and joined the German *natio*.

Metheurorum D. Joanne Marfilio Veneto ad Lea & ostensionem Simplicium Interpresentiones Germannee Protector omnibus publice legentibus inemoratum divir Nationis Germannee Protector omnibus publice legentibus inemoratum divir persuam suculentis: ordinam decorauit fotemniter, & publice insignatif tri ac ornamentis Dostoribus is idem decorauit fotemniter, & publice insignatif tri buitque E idem Prie, & Medic: Libros primo clausos, mox & apertox, Annulumgharbundu Erico prince insignatif in ac Biretum Dostorale pro Laurea Corona capitificatione. Sie jus imposiui, pacisa, goculum Eidem exhibuit cum Macissa sur accordinate in triag. Jumma cum sauch et honore ingenti Preclanssimus & Exe. "" D. JOAN: https://www.num.sur.org/apertorum.com/apert

Figure 2. Last page of the *Publicum doctoratus privilegium* of the University of Padua (Domodossola, Civico Museo di Palazzo Silva and historical archives of the Fondazione Gian Giacomo Galletti del Comune di Domodossola).

On March 17, 1778 Palletta obtained the magisterium in Chirurgia majori at the University of Pavia, with another young surgeon, Francesco Buzzi. We can better understand the meaning of this qualification if we analyse the teaching of medicine in the State of Milan, and at the University of Pavia in particular, in the eighteenth century. After the essential revision of the traditional university framework and programmes started in 1730 (8-12), the levels of academic qualification were three: licenza, magistero, and dottorato. The *dottorato* was required to practice the profession of physician, while the *magistero* was needed for surgeons. Therefore, we can suppose that Palletta had been advised - or had - to acquire the magisterium in major surgery in Pavia in order to take up his professional career at the Ospedale Maggiore in Milan.

This career included the positions of *chirurgo primario* (1780) and *capo chirurgo* (1787) (13), and, as soon as didactics was resumed at the Ospedale Maggiore (in 1786, after that Joseph II's reform of the medical system in the State of Milan had concentrated all the medical chairs in Pavia and stopped every teaching in Milan), the appointments of professor of "Anatomy" (1795) and of "Surgery" (1816) (Fig. 3).



Figure 3. Plaster cast with Giovanni Battista Palletta's profile (Domodossola, Civico Museo di Palazzo Silva and historical archives of the Fondazione Gian Giacomo Galletti del Comune di Domodossola).

The friendship with Scarpa

Many works on the history of medicine mention Giovanni Battista Palletta, well known as "the surgeon of Milan", together with Antonio Scarpa (1752-1832), "the anatomist of Pavia". In fact, in their different roles and institutions, they have both, in the same period, contributed to raise the till then waning reputation of surgery, attaining international fame in the surgical community thanks to their studies and clinical activity.

Nearly of the same age, these two outstanding men were very close friends during their lifetime, and kept up a solicitous correspondence (14), started in May 1786. Scarpa, from the University of Pavia, used to submit his projects and studies to Palletta; also, in order to complete his observations, he often asked him for some pathological specimens. For instance, on October 5, 1796, Scarpa wrote a letter to Palletta accompanying the return of several "morbid bones" he had received from him. With another, undated, letter, Scarpa sent to Palletta a copy of his *Memoria chirurgica sui piedi torti congeniti dei fanciulli* (Surgical note about congenital club foot in children, 1803). Similarly, on February 19, 1805, Scarpa sent to Palletta a copy of his *Index Rerum Musei Anatomici Ticinensis*.

In a letter of July 24, 1817, Scarpa, before leaving for the countryside, prayed Palletta to let him know about any case of aneurysm, since he wanted to complete his note on the subject during his summer holiday (15). It is in this letter that Scarpa, with reference to the great amount of clinical cases the Ca' Granda used to deal with qualified it as «the greatest Pandora's box in Italy» (16). Indeed, the great hospital of Milan, which at the time was one of the most eminent medical institutions, would have been the ideal seat for a faculty of medicine, on the same level of the contemporary medical faculties in Paris, London and Berlin. Instead, pursuant to specific regulations, it had to send all of the substantial anatomical specimens deriving from its activity to the University of Pavia (17). At the end of September 1817 Scarpa was back in Pavia, putting forward his return from the countryside, and once again he wrote to his friend, who was forced to an unwanted rest by an accident (described in the Editoris monitum of Palletta's Exercitationes patologicae). At a few months distance, Scarpa, by a new letter, wanted to check his friend's health conditions, asking to be kept constantly informed.

Different in character and role – powerful arbiter of every university controversy the one, man of few, though witty, words the other, Scarpa and Palletta also had different means for describing their observations. The fame of many of Scarpa's works is certainly indebted to the excellent plates carved by Faustino Anderloni and his workshop, while the humanist Palletta used nothing but his words to illustrate his experiences.

They died in the same year, 1832: Palletta on August 27, Scarpa on October 30.

Together, they really succeeded in restoring Italian surgery's fame on an international scale. Yet, both of them frequently acknowledged the great merits of one of their predecessors, Giovanni Alessandro Brambilla, whom Scarpa personally met too.

Palletta, Scarpa and Brambilla

Giovanni Alessandro Brambilla (1728-1800) became the personal surgeon, friend and adviser of Emperor Joseph II in Vienna. He had, among his merits, the one of supporting the Habsburg reform of the decaying University of Pavia, also by suggesting, while the empress Maria Theresa was starting its restructuring, the names of Johann Peter Frank and Scarpa as suitable professors for the teaching of clinical medicine.

Again, correspondence is a precious source for understanding relationships. In his *Epistolario*, Antonio Scarpa mentions Giovanni Alessandro Brambilla in six letters: to Count Johann Joseph Maria von Wilczek (Modena, April 15 and August 20, 1783), to his dear friend Canon Camillo Tori (Pavia, October 24, 1783), to *Marchese* Gherardo Rangone, and to Professor Michele Rosa. In the first letter to Wilczek Scarpa refers to Brambilla having announced him the transfer to the University of Pavia, while in the second one Scarpa writes about having met Brambilla during his recent journey to Vienna. All the other letters confirm Scarpa's affection towards Brambilla.

As for Giovanni Battista Palletta, in his correspondence with Brambilla, there are clues and evidences of a considerable mutual esteem and consideration. For ex-

ample, Palletta collected in his library four of the most important works by Brambilla, he dedicated to him his own work Adversaria chirurgica (letters dated Vienna, February 2 and June 29, 1786), and he sent him several anatomical specimens from the hospital of Milan (Vienna, August 30, 1788). For his part, Brambilla, when Palletta was facing the regulation of the surgical activity at the Ospedale Maggiore, apparently gave him some suggestions and advice about the training of young surgeons, based on the similar but more tried-out experience of the Military School in Vienna. He even gave his opinion on the inadequate amount of Palletta's salary (Vienna, September 27, 1788 and Laxenburg, August 3, 1789). He repeatedly invited Palletta to Vienna, ensuring that the Treasury would pay for the travel costs (Vienna, January 12, 1789), and, when he was looking for a new surgeon for the Reggimento Belgioioso at the Castle of Milan, he asked Palletta for the name of a suitable candidate (Laxenburg, June 17, 1789). He accepted with pleasure Palletta's request to allow some trainee surgeons to attend the Vienna School (Vienna, August 13, 1789). Finally, in a letter about prizes awarded by the Imperial and Royal Academy of Vienna to some surgical dissertations, Brambilla reiterated his esteem for Palletta and foretold his imminent admission among the academy members. We do not know about further letters from Brambilla to Palletta; however, we know that, following Joseph II's premature death in 1790, Brambilla's importance as a surgeon in Vienna declined, to such an extent that he resigned from the Academy. However, he succeeded in proposing the admission of Palletta at the Academy of Medicine and Surgery, founded by the deceased Emperor.

Achievements and personality

Palletta's most remarkable achievements concern his scientific production in surgery and medicine, which, together with Scarpa, gave back an international fame to Italian surgery. In fifty years of clinical and scientific activity, Palletta published more than thirty works about anatomy, surgery, obstetrics, pædiatrics, pædiatric nursing, even plants and zoology, many of which as notes to the *Istituto Nazionale Italiano* and the *Istituto Lombardo di Scienze e Lettere*.

Here is a brief review of some among his most renowned and original works.

Trattato delle malattie dei bambini (18) (1780), a translation of the work Underrättelser om barns sjukdomar och deras botemedel by Nils Rosen Von Rosenstein, which was considered of prime importance in the field of pædiatric studies. However, Palletta does not confine himself to merely making Rosen's ideas known to Italian doctors, he also integrates the text of the Swedish pædiatrician with some long notes, containing his own personal remarks, as, for instance, about the immediate postpartum period (19). These observations derived from his experience in assisting and helping the abandoned infants, an activity which had remote origins in Milan, with the Ospedale Maggiore as its main seat.

Dissertazione sopra il quesito: produrre nuove esperienze per dimostrare con più sicurezza, che l'aria fissa sia applicabile con vantaggio o no in qualche sorta di malattie (20) (1781), an answer to a request, posed by the Reale Accademia di Scienze e Belle Lettere of Mantua, of producing some new experiments soundly demonstrating that fixed air – that is Carbon dioxide – can be usefully destined to treat some diseases.

Riflessioni sopra la Pubitomia (21) (1781), a note about pubiotomy, the surgical division of pubic symphysis, in order to increase the dilation of the genital tract, thus facilitating childbirth. It is Palletta's first work in the field of obstetrics and gynæcology, for which he will show great interest during his entire professional life.

Trismus a mercurio (22) (1782), a note first published in 1776, where he gives an account of the case of a young man, suffering from syphilis, treated – as it was customary in the eighteenth century – with rubdowns with mercury.

Memoria sui gelsi (23) (1783), a note dealing, quite unexpectedly, with mulberries and silkworm breeding; it earned him a prize from the *Società Patriottica* of Milan, which had proposed a question about remedies and cautions needed when replacing a dead mulberry tree.

De Nervis Crotaphitico et Buccinatorio (24) (1784), a note about trigeminal, where he summarizes the historical development of the scientific achievements concerning this complex cranial nerve, with the sev-

eral mistakes committed in identifying its origin and distribution.

Efficacia delle lucertole prese internamente (25) (1785), a report about some tests aiming at verifying the efficacy of a remedy proposed by Giuseppe Flores in 1782 (26) and concerning the use of lizards to cure cancer, leprosy, and syphilis.

Del modo di curare la frattura del collo del femore senza zoppicamento (27) (1791), a translation of an essay by the German orthopædist Hermann Josef Brünninghausen, about the treatment for a fracture of the neck of femur (28) (1789), which Palletta considers of high interest.

Adversaria chirurgica prima (29) (1794), a work that will have a wide circulation within the international surgical community. The volume comprises three different essays: De claudicatione congenita, written with a thorough knowledge of Latin, and showing the interest Palletta always had for the study of the several causes of congenital limp; Saggio di sperienze sul sangue umano caldo (Essay on experiments about warm human blood), taking the cue from some experiments carried out by Giorgio Baglivi in the previous century; Osservazioni anatomico-patologiche sulla cifosi paralitica (A pathologic-anatomical account of paralytic kyphosis), aiming at informing all the physicians about Percivall Pott's observations on the paralysis of lower limbs, due to spinal tumefactions.

Del movimento retrogrado del sangue (30) (1806), on retrograde blood flow, where Palletta proposes various examples in both arterial and venous blood.

Osservazioni pratiche di Chirurgia – Della cura del polipo uterino (31) (1806), a note sent to the Istituto Nazionale Italiano on June 30, 1804, where Palletta reports his recent experience of three cases of removal of endometrial polyps, formed in the uterus but extending into the vagina.

Del parto pel braccio (32) (On childbirth through an arm, 1808), a note, also proposed to the *Istituto Nazionale*, showing how skillful and even bold was Palletta's contribution to the development of modern obstetrics.

Della vescichetta ombelicale (33) (1808), an interesting essay where Palletta carries out some studies of comparative anatomy in order to confirm and analyse the presence of the so-called "umbilical vesicle" in animals too.

Exercitationes pathologica (34) (1820), Palletta's most weighty book, a great work of theoretical and practical surgery. Published at the end of his career, at an age that necessarily leaved little time for completion, as the author warns in the preface, the work is an unsystematic collection of reports about practices, illustrated by post-mortems or by outstanding rare cases.

Sul morso della vipera (35) (1821), a note expressing his doubts about the assertion, contained in some observations proposed by Giuseppe Mangili at an assembly of the *Imperiale Regio Istituto del Regno Lombardo-Veneto*, that the application of ammonia is always effective and sufficient to cure a viper's bite.

Di alcune singolari fratture di ossa (36) (1824), a contribution to the pathogenesis of bone fractures, through frequent observations of people who, due to a fall, had banged their shoulder against a hard surface.

Ricerche sopra lo sclerome dei neonati (37) (1824), a note where Palletta, with his customary skillfulness, analyses scleroderma, a disease affecting infants, and making their skin become dense, thick and bluish.

So far, Palletta's scientific output. However, he is also notable for other aspects: his commitment in practical fields such as smallpox vaccination, and his bibliophily.

As a member of the medical and surgical Commission the director of the Ospedale Maggiore, Antonio Crespi (38), instituted to settle the campaign against smallpox, Palletta made his own special contribution by proposing a lancet or needle as the most suitable instruments in delivering the vaccine (39). Luigi Sacco accounted for the results of the campaign: in a decade, in Northern Italy more than one million and a half people were vaccinated (40-43).

Palletta's library is now one of the main collections of the library of the Ospedale Maggiore in Milan. It is interesting to run through Palletta's books, listed in the catalogue (*Catalogo del fondo Giovanni Battista Palletta*) published in 1991: the several writings he collected and studied testify his high cultural profile, his inquisitiveness, and his competence, which passed over strictly medical areas.

Unlike Pietro Moscati, who became Napoleon's most trusted adviser, Palletta did never take political

sides openly, and he was always shrewd and wise in administering his estate. Nevertheless, in Milan, he was not popular only as an excellent surgeon and a diligent researcher but as an eccentric character too. Lorenzo Ercoliani describes old Palletta, walking through the streets of his city in 1831, as a strange figure, limping, tall and slender, supporting himself with a rough stick and holding a nosegay in his other hand (44). There is a number of poems describing his personality and reputation in Milan, such as a sonnet composed in Milanese dialect by the president of the Ospedale Maggiore, Temistocle Castelli, entitled "I limon del Palletta" (Palletta's lemons), or the last one of Carlo Porta "Dodes sonitt all'Abaa Giavan".

Conclusion

In this summary of the most outstanding features of Giovanni Battista Palletta's scientific, professional, social and civil activity, it seems important to focus on some fundamental points.

Firstly, the primary importance of the youth studies in Briga: the learning of Latin and German greatly contributed to Palletta's future success. Furthermore, in that context we can assume were the roots of his constant habit of reflecting on the sense of human being and existence, and of investigating the practical application of the principles deriving from thought and meditation.

Secondly, the role of the Ospedale Maggiore in his training and career: in a period when this institution is still in subordinate competition with the university of Pavia, it nevertheless can already count on prestigious surgical schools and gives a thorough scientific education.

Thirdly, the relationship with Antonio Scarpa, both on a human and professional level: although a comparison between these two figures is not simple, it is ascertained that, acting in their respective institutions, they both lifted up the status of surgery, and that they equally succeeded in being acknowledged as eminent scholars and clinicians by the international surgical community.

Fourthly, the great, far-sighted interest Palletta had for neonatal pathology, a commitment that was connected to obstetrics, since the hospital regulations provided for the employment of women who had just given birth to feed the foundlings.

Finally, Palletta's peculiar ability in blending theory and sensible practice: in his writings, he seems to address mainly the physicians operating in real, everyday life, in order to avoid the mistakes of the past, which do persist in the present. For this reason, also the rarer diseases, only exceptionally described in the past, have a basic importance for him.

Palletta is the first surgeon who, between eighteenth and nineteenth centuries, can be considered as a true innovator in Italy. Palletta was modern, and this emerges also from the favour with which he always welcomed clinical trials and laboratory – even animal – experiments.

Through his skilfulness, his original clinical research, and the innovations he introduced, he even surpassed his teachers in achieving international fame. His effigy, in the southern wing of the memorial chapel (Famedio) at the *Cimitero Monumentale* of Milan, testifies the role and merits of this great Milanese surgeon.

Acknowledgements

Thanks to: the Civico Museo di Palazzo Silva and the Fondazione Gian Giacomo Galletti of the Comune of Domodossola, for providing the portraits of Giovanni Battista Palletta and a copy of the *Publicum doctoratus privilegium*; the Archivio dei Luoghi pii elemosinieri di Milano, for providing the correspondence of GA Brambilla; Gianni Penzo Doria, for providing information about the University of Padua; Janet Dionigi, for language revision of the manuscript; Andrea Terreni, for help in archival research and revision of the translations from Latin; Sara Fontana, for bibliographical check.

References

- Dionigi R. Giovanni Battista Palletta (1478-1832). Protochirurgo all'Ospedale Maggiore di Milano. Pavia: Cisalpino Istituto Editoriale Universitario; 2016.
- 2. Della Peruta F. Cultura e organizzazione del sapere nella Lombardia dell'Ottocento. L'Istituto Lombardo di Scienze e Lettere dalla fondazione all'Unità d'Italia. In: L'Istituto Lombardo Accademia di Scienze e Lettere, Vol. I, Storia istituzionale. Milano: Libri Scheiwiller; 2007; 3-493.
- 3. Castelli G. GB. Palletta. Una popolare figura di medico

- filantropo. In: Castelli G. Figure dell'Ottocento alla "Cà Granda". Milano: Famiglia Meneghina Editrice; 1940; 171-87.
- Scaciga Della Silva F. Vite di ossolani illustri con un quadro storico delle eresie. Domodossola: dalla tipografia Vercellini; 1847.
- Canetta P. Cronologia dell'Ospedale Maggiore di Milano. Milano: Tipografia Lodovico Felice Cogliati; 1884.
- 6. Pecchiai P. Guida dell'Ospedale Maggiore di Milano e degli Istituti annessi. Milano: Stucchi Ceretti; 1926.
- 7. Cosmacini G. Biografia della Ca' Granda. Uomini e idee dell'Ospedale Maggiore di Milano. Roma: Laterza; 2001.
- Calligaro A. Gli studi medici nell'Università di Pavia dal 1535 alla fine del '700. In: Storia di Pavia, vol. IV, L'età spagnola e austriaca, tomo II. Milano: Banca Regionale Europea; 1995; 586-9.
- Galeotti AE. Politica della cultura e istituzioni educative. La riforma dell'Università di Pavia (1753-1778). Pavia: Centro studi Illuminismo lombardo; 1978.
- Ferraresi A. Dalla periferia al centro. Pavia e la sua Università nella seconda metà del Settecento. Annali di storia pavese 2000; 28:87-104.
- 11. Ferraresi A. L'Università di Pavia tra età giuseppina ed età napoleonica: leggi, circolari, decreti. In: Romano A. (ed.) Gli statuti universitari. Tradizione dei testi e valenze politiche. Dall'originarietà degli Studi Generali all'autonomia delle Università degli Studi (secc. XI-XXI). Atti del Convegno internazionale di studi, Messina-Milazzo, Italia, 13-18 aprile 2004, 547-58. Bologna: CLUEB; 2007.
- 12. Di Renzo Villata MG. Tra Vienna, Milano e Pavia: un piano per un'università "dall'antico lustro assai decaduta" (1753-1773). In: Romano A. (ed.) Gli statuti universitari. Tradizione dei testi e valenze politiche. Dall'originarietà degli Studi Generali all'autonomia delle Università degli Studi (secc. XI-XXI). Atti del Convegno internazionale di studi, Messina-Milazzo, Italia, 13-18 aprile 2004. Bologna: CLUEB; 2007; 507-46.
- 13. Scotti Foglieni L. Gian Battista Palletta capo chirurgo dell'Ospedale Maggiore di Milano (1748-1832). L'Ospedale Maggiore 1932; XX:755-60.
- 14. Calamida U. Antonio Scarpa. Lettere a G. Palletta e ad altri con un saggio bibliografico del suo epistolario. Per le nozze del Dott. Prof. Leopoldo Rossi con la Sig.na Maria Letizia dei Conti Sottocasa. Milano: Tip. Conti; 1933.
- Scarpa A. Memoria sulla legatura delle principali arterie degli arti con app. all'opera sull'aneurisma di Antonio Scarpa. Pavia: Bizzoni; 1817.
- 16. Palletta M. Elogio storico del Cavalier Gio. Palletta, Professore di Anatomia e Capo Chirurgo al Grande Spedale di Milano. In: Memorie di Matematica e di Fisica della Società Italiana delle Scienze residente in Modena, tomo XXII. Modena: nella R. Tipografia camerale; 1839; p. XLV.
- 17. Pecchiai P. Guida dell'Ospedale Maggiore di Milano e degli Istituti annessi. Milano: Stucchi Ceretti; 1926; 218-19.
- Rosen de Rosenstein N. Trattato delle malattie dei bambini di Nicolò Rosen De-Rosenstein archiatro svedese, Cavalie-

- re dell'Ordine della Stella Polare, e presidente dell'accademia reale delle scienze di Stockolma, trasportato dal tedesco con alcune note da Giovanni Battista Palletta. Milano: Nell'Imperial Monistero di S. Ambrogio Maggiore; 1780.
- 19. Rosen de Rosenstein N. Trattato delle malattie dei bambini di Nicolò Rosen De-Rosenstein archiatro svedese, Cavaliere dell'Ordine della Stella Polare, e presidente dell'accademia reale delle scienze di Stockolma, trasportato dal tedesco con alcune note da Giovanni Battista Palletta. Milano: Nell'Imperial Monistero di S. Ambrogio Maggiore; 1780; 15-25.
- 20. Palletta GB. Dissertazione sopra il quesito: produrre nuove esperienze per dimostrare con più sicurezza, che l'aria fissa sia applicabile con vantaggio o no in qualche sorta di malattie presentata dal signor dottore Giovanbattista Palletta... al concorso dell'anno 1780 e qualificata coll'Accessit dalla Reale Accademia di scienze, e belle arti di Mantova. Mantova: per l'erede di Alberto Pazzoni; 1781.
- Palletta GB. Riflessioni sopra la Pubitomia. Giornale per servire alla Storia ragionata della Medicina di questo secolo 4 giugno 1781; XI.
- 22. Palletta GB. Trismus a mercurio. Ossia impossibilità all'Abbassamento della Mascella inferiore sopraggiunta in tempo delle frizioni mercuriali. In: Scelta di opuscoli interessanti, tomo II, contenente i 12 volumi dell'anno 1776. Milano: nella stamperia di Giuseppe Galeazzi; 1782; 404-06.
- 23. Palletta GB. Memoria sui gelsi del sig. Gio. Battista Palletta che riportò il premio proposto dalla Società Patriottica nel programma dell'anno 1778. In: Atti della Società Patriottica di Milano, vol. I, parte I. Milano: nell'Imperial Monistero di Sant'Ambrogio Maggiore; 1783; 39-63.
- 24. Palletta GB. De nervis crotaphitico et buccinatorio. Mediolani: Typis imperialis monasterii S. Ambrosii Majoris; 1784.
- 25. Palletta GB. Ragguaglio d'alcuni sperimenti fatti negli anni 1784-85 nello Spedale di Milano intorno all'efficacia delle lucertole prese internamente. In: Opuscoli scelti sulla Storia e sulle Arti, tomo VIII. Milano: presso Giuseppe Marelli; 1785; 406-14.
- 26. Flores J. Especifico nuevamente descubierto en el reyno de Goatemala, para la curacion radical del horrible mal de cancro y otros mas frecuentes (experimentado ya favorablemente en esta capital de México), su autor el Dr. Don Jose Flores. En Mexico: en la imprenta de D. Felipe de Zúñiga y Ontiveros; 1782, translated in Italian by Carlo Maria Toscanelli: Flores G. Del maraviglioso specifico delle lucertole, o ramarri per la radical cura del Cancro, della Lebbra, e Lue Venerea. Ultimamente scoperto dal Signor D. Giuseppe Flores dottore della facoltà medica nell'Università di Guatimala, Alle cui sperienze, ed osservazioni si aggiungono le relazioni di varie cure fatte recentemente nel Piemonte. Il tutto raccolto da Carlo Maria Toscanelli. Torino: presso l'Editore; 1784.
- 27. Palletta GB. Del modo di curare la frattura del collo del femore senza zoppicamento, di Hermanno Giuseppe Brünninghausen trasportato da G. B. Palletta. Milano: nella stamperia di Giuseppe Marelli; 1791.

- 28. Brünninghausen HJ. Hermann Joseph Bruenninghausen über den Bruch des Schenkelbeinhalses überhaupt, und insbesondre eine neue Methode, denselben ohne hinken zu heilen. Würzburg: Stahel; 1789.
- Palletta GB. Adversaria Chirurgica prima [De Claudicatione congenita. Saggio di sperienze sul sangue umano caldo]. [Milano?: s.n.]; [1794 circa].
- 30. Palletta GB. Del movimento retrogrado del sangue e della forza nervea (estratto a cura della segreteria dell'Istituto). Memorie dell'Istituto Nazionale Italiano - Classe di Fisica e Matematica 1806; 1.1:XXXIV-LXX.
- 31. Palletta GB. Osservazioni pratiche di chirurgia. Della cura del polipo uterino – Idrocele delle donne – Ernia vaginale - Litotomia Celsiana. Memorie dell'Istituto Nazionale Italiano - Classe di Fisica e Matematica 1806; 1.1:86-117.
- Palletta GB. Del parto pel braccio. Memorie dell'Istituto Nazionale Italiano - Classe di Fisica e Matematica 1808; 2.1:361-72.
- Palletta GB. Della vescichetta ombelicale. Memorie dell'Istituto Nazionale Italiano - Classe di Fisica e Matematica 1808; 2.1:373-90.
- 34. Palletta GB. Exercitationes pathologicae auctore Joanne Baptista Palletta equite a Corona Ferrea honorisque legione. Mediolani: excudebat Societas Typographica e Classicis Scriptoribus Italicis nuncupata; 1820, 2 voll.
- Palletta GB. Considerazioni sul morso della vipera. Memorie dell'Imperiale Regio Istituto del Regno Lombardo Veneto anni 1814-1815 1821; 2.2:6.
- Palletta GB. Di alcune singolari fratture di ossa. Memorie dell'Imperiale Regio Istituto del Regno Lombardo Veneto anni 1816-1817 1824; 3.2:61-6.
- Palletta GB. Ricerche sopra lo sclerome o sopra la malattia dei neonati detta volgarmente indurimento cellulare. Ibid.: 345-56.
- 38. Risultati di osservazioni e sperienze sull'inoculazione del vajuolo vaccino instituite nello spedal maggiore di Milano

- dalla Commissione medico-chirurgica superiormente delegata a questo oggetto. Pubblicati per decreto del Comitato governativo della Repubblica Cisalpina. Milano: dalla tipografia di Luigi Veladini; 1802; 5.
- 39. Risultati di osservazioni e sperienze sull'inoculazione del vajuolo vaccino instituite nello spedal maggiore di Milano dalla Commissione medico-chirurgica superiormente delegata a questo oggetto. Pubblicati per decreto del Comitato governativo della Repubblica Cisalpina. Milano: dalla tipografia di Luigi Veladini; 1802; 37-8.
- Sacco L. Trattato di vaccinazione con osservazioni sul giavardo e vajuolo pecorino. Milano: dalla tipografia Mussi; 1809.
- Porro A. Luigi Sacco e la prima grande campagna di vaccinazione contro il vaiolo in Lombardia, 1800-1810. Confronti. Autonomia lombarda: le idee, i fatti, le esperienze 2012; 4:167-81.
- 42. Belloni L. Luigi Sacco e la diffusione del vaccino in Italia. Simposi clinici 1966; III.4:LIII-LX.
- 43. Armocida G, Gorini I. Nella Lombardia di Luigi Sacco. In: Tagarielli A, Piro A and Pasini W (eds.) Il vaiolo e la vaccinazione in Italia, vol. II, [s.l]: Consiglio nazionale delle ricerche, Istituto di scienze neurologiche, World Health Organization, Collaborating Centre for Travel Medicine; stampa 2004, 673-706.
- 44. Ercoliani L. Gio. Batt. Palletta. Cosmorama pittorico 1842; VIII:291.

Correspondence:

Claudia Biraghi

International Research Center for Local Histories and Cultural Diversities, University of Insubria, Varese, Italy

E mail: claudiabiraghi@uninsubria.it