



Anaesthesia in nummis

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Abstract

Some topics of the ars medica concerning anaesthesia, pain therapy and critical care medicine have been totally neglected till now, e.g. anaesthesia in the book owner signs (“ex libris”) and in medical numismatics. This first historic investigation into anaesthesia in the numismatics will collect all medical medallions referring to or representing anaesthesia in public or private numismatic collections. It will also provide information about commemorative medals of the forerunners, pioneers and promoters of our profession worldwide. This task will interest future societies as well as passionate private medical coin collectors. A well-founded and comprehensive numismatic collection can also be used as a tool and as a resource for historical studies of medicine. In addition, medical coins, medallions, medals and plaquettes ought to be regarded under both aspects of aesthetic and scientific value in itself. They are diminutive historic “monuments” with compressed symbolic meaning and high artistic claim, being best suitable to immortalize historic events and maintaining the memory of outstanding investigators and clinical teachers of anaesthesia.

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1. Introduction

“Historical portraits awaken interests at all time, even if they aren’t artistic works; everybody tries to recognize the fate and acts in their physiognomy. H. von Moltke”

One of the main topics of the 5th I.S.H.A. in Santiago de Compostela is devoted to the art in medicine and medicine in the arts. Many of them, e.g. the illustration of our profession in the graphic art (caricature and drawing), philately [1], sculpture and painting as well as in the belle-lettres (essays, novels and poems) are mirrored or in other ways (in

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Table 1
The greatest collections of medical numismatics

Collectors	Location of the collection	Number of medical coins (approximately)	References
Josef Brettauer (1835–1905)	Institute of Numismatics of the University of Wien	6000	[6,12]
Géza Faludi (1874–1953)	Semmelweis Museum of the History of Medicine, Budapest	around 10,000 (with 4000 Hungarian medical medallions)	[4,8,10,11]
Horatio Robinson Storer (1830–1922)	Medical Library, Boston (as a part of the numismatic collection of the John Hopkins University)	around 4000 (from the approximately 15,000 medical coins of Robert Garrett)	[5,7]

cinema and television), and are therefore well-known (see also on the Internet: www.anes.uab.edu/anehist/popular.htm). Meanwhile, many symbols of anaesthesia and related sciences are found in the signets (crests) of societies worldwide [2]. Milicchio planned to report on this at the 5th I.S.H.A. [3]. However, there are also other topics of ars medica which have been neglected up until now. The first of these to be considered are the book owner signs (“ex libris”) and the “anaesthesia in nummis”.

Anaesthesia-related medical coins, plaques and commemorative medallions (with a minimum diameter of 150 mm) can only occasionally be detected in numismatic collections [4–11] (Table 1). Studies of historic or artistic art dealing with the theme

Table 2
Anaesthesia-related medals and medallions existing only in the collection of the national societies of anaesthesia or in private coin-cabinets (Ref. [20] and personal communications from M. Goerig, 2001, J. Benedum, 2001, H. Sorgatz, 2001, Á. Szállási, 2001 and F. Frei, 2001)

Th. Paracelsus	(from the private collection of Á. Szállási, Hungary, 2001)
H.H. Hickman	(founded in 1931 by the Royal Society of Medicine)
J.F. Heyfelder	(founded in 1997, by the Clinic of Anaesthesiology of the University of Erlangen)
Th. Billroth	(portrayed on the two Schilling coin in Austria, 1929)
H.F.W. Braun	(founded by the German Society of Anaesthesiology and Intensive Therapy, DGAI, Nuremberg, 1991)
F. Kuhn	(commemorative medal of the German Society of Anaesthesiology and Intensive Medicine, Nuremberg, 1987)
Ernst von der Porten	(commemorative medal of the German Professional Organization of Anaesthesiologists, BDA, Nuremberg, 1987)
Sir R. Macintosh	(founded by the Spanish Society of Anaesthesiologists)
R. Frey	(commemorative medal of the German Society of Anaesthesiology, DGAI, Nuremberg, 1990)
F. Oehlecker	(medal and medallion; lent by Anna Oehlecker, daughter, 2001)
H. Kümmel	(medallion, lent by M. Goerig, Hamburg-Eppendorf)

Table 3

Forerunners, promoters and therapists who are still missed

G. Pliny Secundus	F
P. Dioscurides	C
Geber/R. Lullus	M
V. Cordus	H
D.F.A. Cotugno	C
T. Sydenham	J
G. Hirschel	F
P.C. Oré	L
E. Fischer	H
A. Einhorn	H
O. Witzel	C
C. Schimmelbusch	A
W.G. Bigelow	C
H. Laborit	F
P. Huguenard	F
K. Hutschenreuter	F

^a Some of them can be found in the collections of the anaesthesia societies of the anaesthesia societies.

numismatic in anaesthesia. The relevant literature of the 20th century is: 2001, K. Wiemers.

Likewise, no systematic study of anaesthesia, some of the scientists, outstanding epoch-making discoveries.

Table 4

Medical coins (plaques and medallions) following [3,6,9,10,12,13]

- Portraits of scientists, on their retirement
- Genealogical tree of families
- Official crests of societies
- Anniversary (foundation)
- Medical congresses and conferences
- Hospitals, social welfare
- Charitable organizations, natural catastrophes
- Medical superstition
- Water-supply and other
- Epidemics (e.g. plague)
- Pharmacology drugs
- Sexual life, erotics, etc.

Table 3

Forerunners, promoters and historical persons of anaesthesia, intensive care, emergency medicine and pain therapy who are still missing in the great medical numismatic collections (see Table 1)

G. Pliny Secundus	F.W. Sertürmer	J.F. Heyfelder ^a	J.T. Clover	E. Gurlt
P. Dioscurides	C.W. Scheele	N.I. Pirogow	A. Wood	S. Riva-Rocci
Geber/R. Lullus	M. Faraday	H.A. Demme	J. O'Dwyer	H.W. Cushing
V. Cordus	H.H. Hickman ^a	J.F. Dieffenbach	F.v. Trendelenburg	C.L. Schleich
D.F.A. Cotugno	G.Q. Colton	J.Y. Simpson	O. Kapeller	H.F.W. Braun ^a
T. Sydenham	J.C. Warren	J. Snow	R. Boehm	H.I. Quincke
G. Hirschel	F. Kuhn ^a	H. Kümmel ^a	L. Ombrédanne	F. Oehlecker ^a
P.C. Oré	L. Brauer ^a	M. Kirschner	M. Neu	H. Weese ^a
E. Fischer	H. Killian	L. Lewin	R.M. Waters	Sir I.W. Magill
A. Einhorn	H.E.G. Boyle	J.N. Czermak	J.S. Lundy	Sir R.R. Macintosh
O. Witzel	G. Labat	Sir F.W. Hewitt	A.E. Guedel	R. Kucher
C. Schimmelbusch	A. Læwen	Sir W. Macewen	E. von der Porten ^a	H.R. Griffith
W.G. Bigelow	C.G. Engström	R. Frey ^a	P.A.J. Janssen	L. Barth
H. Laborit	F.F. Foldes	T.C. Gray	T. Gordh	J. De Castro
P. Huguenard	W. Hügin	K. Horatz	J. Gibbon	J.F. Nunn
K. Hutschenreuter	B. Haid	J. Bonica	R. Melzack	P. Mundelehr

^a Some of them can be found in private collections or as a commemorative medallion awarded by national societies of the anaesthesia; see Table 2.

numismatic in anaesthesia seem rarely to be pursued; indeed, they seem totally absent in the relevant literature of our profession (letters to the author from J. Benedum, 2001, P. Sim, 2001, K. Wiemers, 2001, M. Goerig, 2001 and K. Wiemers, 2001).

Likewise, no systemic investigation has ever been carried out into the medical coins of anaesthesia, some of which are awarded each year on a grand occasion to prominent scientists, outstanding clinicians and deserved promoters of our speciality, or granted for epoch-making discoveries and methods in the scientific foundation of clinical anaesthesia.

Table 4

Medical coins (plaquettes, medals and medallions) commemorate and inform through the reference to the following [3,6,9,10,12,13,15–24]

- Portraits of scientists, lecturers and great clinicians as commemorative medals for congratulations on their retirement
- Genealogical tree of the leaders of universities, clinics and medical schools
- Official crests of societies and public/national corporations/public relations in medicine
- Anniversary (foundation year of institutions, clinics and departments)
- Medical congresses and symposia/international communications and associations
- Hospitals, social welfare and public assistance (e.g. relief of the poor)
- Charitable organizations/Red Cross/First Aid/care for refugees, minimizing the potential destruction of natural catastrophes/warfare and years of famines
- Medical superstition and medical folklore/places of pilgrimage and worship of patron saints
- Water-supply and other hygienic measures/mental hygienics
- Epidemics (e.g. plague) and vaccinations (protective inoculations)
- Pharmacology/drugs for men and veterinary medicine
- Sexual life, erotics, fertility and pregnancy

The finding of such medals in private or public numismatic cabinets can be very difficult (see Table 2). Many of the coins portraying great anaesthetists are missing even in extensive collections [4–8,11] (see Table 3).

This study presents a short survey and as the first comparative historic approach to the world of medical numismatism giving some aspects for the use of coins, it is a study of history (Table 4), which highlights the “missing links” for future collectors (Table 3). With regard to the more than 150-year-old evolution of narcosis, a numismatic investigation was deemed timely and suitable to be undertaken here (see Table 5: Determination of the medical coins complete with a short biography for numismatics).

Medical coins of large and complete collections represent a national pantheon par excellence [14]; they are a gallery of our professional ancestors in miniature (Table 6).

The custom of making coins for physicians and medical innovations began with the anatomical drawings of Leonardo da Vinci and Michel-Angelo as well as with the works of some pupils of Titian. Petrus Crescentius was the first who connected the fine art of portraits to medicine (Sambucus, 1603). Since then, the creative work of the medailleurs has been upheld as royal art according to the ancient motto: “Si rex fieri non-potes medicus excellens esto” (When you cannot become a king, be a doctor!). This is why the medallions ought to be regarded as having both aesthetic and scientific value itself. In this way, the most commemorative medals are diminutive historic “monuments” with compressed symbolic meaning and high artistic claim. Nearly all medical medallions have been created with the single aim of commemorating and immortalizing the events of an epoch where significance stretches from the past into to the future [14]. However, medical coins are also excellent tools and resources for the historical study of medicine (Tables 4 and 6).

Table 5

Determination of an anaesthesia-related medal (coins or medallions), completed with a short biography for numismatics: Example *Crawford Williamson Long* (after Storer [5]):

Description of the commemorative medal of C. W. Long: Medal. Galvano, silvered. Size 76 mm. Medailleur:

R. Trait McKenzie. Reduction of the commemorative medallion at University of Pennsylvania.

Short biography: Crawford Williamson Long American physician and surgeon. 1815–1878. Georgia Long received a medical degree from the University of Pennsylvania in 1839, and after spending a year in New York, he returned to Georgia, a country practice. He also brought back with him the trick of inhaling ether vapor for fun, or as an exhilarant, which led him to the discovery of the anaesthetizing power, and he used it successfully in a surgical operation in 1842. On the occasion of the unveiling of the bronze medallion in the medical laboratories of the University of Pennsylvania, March 30, 1912, Dr. John Chalmers Da Costa concluded: “The University of Pennsylvania this day hangs his likeness in the Hall of Fame with her noblest son. He was an honor of his Alma Mater, an ornament to his profession, a glory to his country, an a benefactor of the human race,” (Ann. Med. Hist., VII; 1925, p. 418).

Head site (Obv): Half-figure of Dr. Long left, holding cloth with the left hand, over lower portion of patients face, and administering ether from bottle held in the right hand; in a curve above: ‘To Crawford W. Long. First to use ether as an anaesthetic in surgery/March 30th. 1842. From his Alma Mater in two concentric lines, in field at left, 1815/1878’; and in the field at right, R. Trait McKenzie/1912 incuse, at bottom, tablet on which Class of Pennsylvania; along the edge at left and right, framing lower part of scene, sprays of poppies bound with ribbon (symbolizing sleep; Freeman, 1964 [7]).

Table 6
Famous forerunners, scientists, clinicians and promoters of the anaesthesia being already represented in official collections of great numismatic cabinets; see Table 2 (after Refs. [4,6,8–10,23–26,33] and personal communication from P. Sim, 21/6/2001)

Topics	J. Brettauer: Medicina in nummis [6,23] (number in catalogue)	Numismatic collection of the John Hopkins University, 1964 (number in catalogue). After Ref. [7] number in catalogue	Numismatic collection of the Semmelweis Museum of the History of Medicine Budapest [4,8,10,11]	Horatio Robinson Storer: Numismatic collection of the Medical Library in Boston [5,9] (number in catalogue)
Solanaceae			Nr. 57, 60, 64, 735, 1538 (Table IX) Nr. 1782 (Table CVI)	Nr. 1135–1136
Plinius Gaius Sec. Galen	Nr. 1311–1312, 2544–2551			
A. Vesalius	Nr. 1260–1269			
Paracelsus	Nr. 843–845	Nr. 383	Nr. 1844, 979	Nr. 2696–2711
W. Harvey	Nr. 470	Nr. 232–233		Nr. 1475–1477
Sir Chr. Wren	Nr. 1020			Nr. 3814–3815
M.A. Severino	Nr. 239	Nr. 116		
Santorio Santoro	Nr. 379–385			
A. Paré				Nr. 2712–2716
L. Galvani				Nr. 1169–1180
A. Volta				Nr. 3660–3693
F. Hoffmann	Nr. 423	Nr. 247		Nr. 1566–1567
G.W. Wedel	Nr. 1311			
A.L. Lavoisier		Nr. 305–307	Nr. 1860	Nr. 2039–2057
C.W. Scheele				Nr. 3204–3207
L.J. Gay-Lussac				Nr. 1200–1201
H. Davy				Nr. 804–806
M.J.B. Orfila	Nr. 827	Nr. 372–373		Nr. 2652–2654

(continued on next page)

Table 6 (continued)

Topics	J. Brettauer: Medicina in nummis [6,23] (number in catalogue)	Numismatic collection of the John Hopkins University, 1964 (number in catalogue). After Ref. [7] number in catalogue	Numismatic collection of the Semmelweis Museum of the History of Medicine Budapest [4,8,10,11]	Horatio Robinson Storer: Numismatic collection of the Medical Library in Boston [5,9] (number in catalogue)
F. Magendie	Nr. 726			
F.A. Mesmer	Nr. 762–764	Nr. 815	+	Nr. 2433–2435
J. Hunter	Nr. 544			Nr. 1712–1719
D.J. Larrey	Nr. 634–635	Nr. 293–295		Nr. 2016–2017
C.W. Long		Nr. 330; see Table 3		Nr. 2256–2257
H. Wells				Nr. 3758–3759
Ch.Th. Jackson			+	Nr. 1750
W.T.G. Morton				Nr. 2543
O.W. Holmes				Nr. 1588–1589
H.J. Bigelow				Nr. 366 (founded in 1914)
R. Liston	Nr. 699			
J. Lister				Nr. 2220–2223
J.F. Heyfelder				+(Anästh.Klinik Erlangen, 1997)
Graf E. von Bibra				Nr. 358
O.L. Binswanger	Nr. 812	Nr. 60, 61		Nr. 375
J.N. v. Nussbaum				Nr. 2620
F. Flor			Nr. 153–155	
J. Balassa			Nr. 17	
D. Gruby	Nr. 428	Nr. 216	Nr. 188	Nr. 1391
Claude Bernard	Nr. 82			
E.J. Marey		Nr. 33	+	Nr. 2364–2365
J. Liebig	Nr. 653–658	Nr. 341		Nr. 2149–2155
Ch. Jackson		Nr. 260		
P. Bert		Nr. 36, 37		Nr. 320–321
Th. Billroth	Nr. 112–113	Nr. 56–59	Nr. 52–54, 1891, 1894, 1926	Nr. 373–374, 374/a
C. Koller				Nr. 1370
S. Freund				Nr. 1126
A. von Guericke		Nr. 122		

2. Conclusions

2.1. Tasks for the future: Anaesthesia in nummis for collectors and museums of anaesthesia (see Tables 3 and 6)

There were various possibilities for societies and universities having medical coins, plaques and commemorative medallions struck by medailleurs in order to immortalize famous scientists and teachers (as medallists) or important events in the evolution of anaesthesia. Having them made as a set of special subject/topics, one could offer such anaesthesia-related coins to private collectors, or as was usual, they were awarded for outstanding performance, scientific innovations or as an honour of eminent clinical teaching and investigation, e.g.

- Botanical set of the Solanaceae and other narcotic and psychotropic herbs (coca, hemp, ergot, hemlock),
- Evolution of inhalation anaesthesia,
- Pioneers of the investigation of muscle relaxants (Pereira, La Condamine, A. v. Humboldt, Sir B. Brodie, Ch. Waterton, Claude Bernhard, R. Boehm, L. Lewin, R. Gill, H.R. Griffith, E. Johnson, F.F. Foldes, etc.),
- Commemorative medallions of outstanding investigators and clinicians (“Series Numismatica Virorum Illustrium Anaesthesiologiae”) on the basis of annual subscription to bronze replicas,
- Historical anaesthesia apparatus, ventilators and their inventors/leading manufacturers,
- Evolution of the tracheotomy and endotracheal intubation (the struggle for free airways over centuries),
- Pioneers of the regional anaesthesia,
- Plaques, medals and plaquettes of anaesthesia societies to commemorate occasions, e.g. anniversaries.

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