# Contemporary Medicine<sup>1</sup>

The turn of the eighteenth century saw the transfer of power in the Maltese Islands from a rule under the Order of St. John to the French, and later the Islands fell under British dominion. The changes in the political sphere led to a breaking off of connections with the French medical influence, so that Maltese medical history underwent a definite change in direction, for from then onwards the current medical thought and influence veered mainly towards Edinburgh and later on to London. This influence was further prompted by contacts with British medical practitioners who worked in Malta with the British naval and military garrisons or who settled on the Islands. Maltese practitioners also proceeded to the United Kingdom to further their medical studies. In April 1812 Dr. Cleardo Naudi was sent to London by the British Government for the purpose of making himself better acquainted with the regulations of the medical schools in that country. Prof. S.L. Pisani, who eventually became the first Chief Government Medical Officer, furthered his medical studies sat the University of Edinburgh, obtaining a medical doctorate from that university in 1853 and subsequently proceeded to London, Paris,

<sup>&</sup>lt;sup>1</sup> First published in: C. Savona-Ventura: *Outlines of Maltese Medical History*. MidSea Publ.: Malta 1997:p.35-40

Berlin, Vienna and Italy to familiarise himself with medical practice on the continent  ${}^{2}[1]$ .

Maltese practitioners of the nineteenth century remained however conversant with the writings of the leaders of continental medical thinking. A number of efforts were undertaken to promote continuing medical education by medical journals. The first Maltese medical journal L'Ape Melitense was published in 1838. The journal included reviews and abstracts from continental medical publications, besides several original papers. This however had a relatively short life with only four monthly publications. The subsequent Maltese medical publication Il Filocano was issued in 1841, but this only survived to 1842. The third attempt at publishing a regular medical journal was made in 1871 with the publication of the journal Il Barth, this continuing publication until 1877. La Rivista Medica appeared in 1890 continuing until 1892. A renewed effort to publish a medical journal was made in 1897 with the issue of La Saluta Publica, which however continued its publication for only a year. In the twentieth century a renewed effort was made to revive La Rivista Medica in 1922, but only a few issues were published. In 1949, the British Medical

<sup>&</sup>lt;sup>2</sup> P. Cassar: Medicine in Malta in 1800-1810. Contrasts, Concepts and Personalities. *St. Luke's Hospital Gazette*, 1971, 6:p.3-20; P. Cassar: The Anglo-Maltese legacy in Medicine. *The Times*, suppl. 28 May 1992, p.18-19; P. Cassar: Profile. Professor Salvatore Luigi Pisani M.D. (1828-1908). *Malta Today*, 1982, 17(3):p.14-16

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Students Association (Malta Branch), later the Malta Medical Students Association, issued its publication Chestpiece, a medical publication which ran irregularly until 1979. It was eventually replaced in 1983 by Mediscope. In 1966 the medical profession issued a medical journal entitled St. Luke's Hospital Gazette which ran until 1976. It was subsequently replaced in 1988 by the Maltese Medical Journal. In 1983 the Association of Anesthesiologists in Malta issued its first edition of an annual journal entitled Acta Anaesthesiologica Melitensis which ran for six issues. Maltese medical associations likewise helped in the diffusion of knowledge among local practitioners. The Societa Medica d'Incorragiamento was founded in 1837 and existed until 1870. This society had corresponding members in Italy, France, Switzerland, Constantinople, Prussia, Egypt, England and America. Its proceedings were published in book form. In 1885, the Camera Medica was founded with the aim of providing foreign scientific journals and to promote discussion of questions of medical interest. The Malta Branch of the British Medical Association was founded in 1888. A number of other medical associations, usually of a restricted nature sprouted up in the last thirty years. In 1954 the Medical Officers Union, later Medical Association of Malta, was founded. This Union/Association was concerned more with trade unionism rather than the dissemination of medical knowledge. A

second registered trade union, *Union of Government Medical Doctors*, was formed in 1987 <sup>3</sup>[2] but was disbanded in 1992.

During the tremulous years of the French occupation in the late eighteenth century, medical studies were interrupted. The Medical School was re-established by Sir Alexander Ball in 1800. The initial phase of the revival of medical studies were marked by an unsettled state of medical and surgical studies, though the professional standards were not below contemporary ones elsewhere. In 1836 a Royal Commission was appointed to inquire into the administration of the university. The Commissioners proposed five professors to teach anatomy and surgery, medicine, obstetrics, chemistry and botany. Philosophy, hygiene, natural history and forensic medicine were also to be taught as minor subjects. In 1879 Mr. Patrick Joseph Keenan, Resident Commissioner of National Education in Ireland, was sent to Malta to inquire into the educational system on the Island. He expressed the opinion that with a recasting of the medical curriculum of the university "this little School of Medicine and Surgery might ..... be able to hold its own with any other Medical College in the British Empire and be fairly entitled to the recognition and privileges accorded to students in the Universities and Colleges of Great Britain, Ireland and the Colonies". This recognition was made to apply by the

<sup>&</sup>lt;sup>3</sup> P. Cassar: Medical History of Malta. Welcome Histr. Med. Libr., London, 1965,

Order in Council in 1901 (Medical Act 1886). This recognition furthered the Malta-British medical connections throughout the twentieth century. It was suspended after 1977 as a result of a tradeunionist dispute between the Malta Government and the medical profession. Recognition for temporary registration allowing Maltese graduates to work in the United Kingdom was eventuality reestablished in 1986. The interval allowed a short but significant shift of cultural attachment to other European countries, including Belgium, France and Italy <sup>4</sup>[3].

The nineteenth century was a period of rapidly accelerating change and development. Scientists made countless discoveries and formulated many basic laws, while the Industrial Revolution saw the application of the new knowledge on something like the modern scale. At the same time, overcrowding in the new industrial towns brought health problems that recalled the Middle Ages. However more effective measures could be taken to combat the epidemics. A new era of preventive medicine began in 1796, when Edward Jenner pioneered the use of cowpox vaccine to produce immunity to smallpox. The practice was at once widely adopted, soon diminishing a disease that had previously been one of mankind's greatest plagues. Smallpox has

p.541-543; C. Savona-Ventura: Editorial. *Chestpiece*, 1979, 5:p.5 <sup>4</sup> P. Cassar, 1965: *op. cit.*, p.437-464

existed along the Mediterranean littoral since at least the eight century. Variolation inoculation against smallpox was practised in Malta in 1769, but the results of this were so disappointing that the procedure was prohibited by decree. Following Jenner's demonstration of the safety of vaccination using cowpox inoculation, this procedure received the backing of the Maltese Government at the turn of the nineteenth century. In July 1800, Drs. J. Marshall and J. Walker left England with a supply of variola vaccine to vaccinate the British forces in the Mediterranean. When Dr. J. Marshall arrived in Malta, the Governor ordered that all naval personnel were to be vaccinated, while a number of Maltese children were also inoculated in the presence of two Maltese physicians. By 1842 free inoculation was made available at the Civil Hospital. An epidemic of smallpox occurred in 1830, being introduced from Naples into Malta by HMS Asia. The number of persons attacked was 11351 with 1523 deaths. Subsequent outbreaks occurred in 1837. Vaccination was made compulsory in 1855, but this law was not regularly observed by the population so, that another epidemic occurred in 1861 when 362 person died. Another epidemic occurred in 1870 when seven thousand civilians were affected with 700 deaths. The last smallpox epidemic in Malta occurred in 1946 with seven cases being reported resulting in one fatality. A number of other infective diseases were introduced into the Islands as a result of the maritime traffic. These were often of a

localised nature, however the introduction of cerebrospinal meningitis and typhus in the twentieth century resulted in these becoming endemic diseases  ${}^{5}$ [4].

In the second half of the nineteenth century revolutionary developments in microbiology had a profound effect both on knowledge of the causation of disease and the approach of doctors toward illness. The advance in microbiology was also contributed to by doctors working in Malta. Malta, Mediterranean or Undulant Fever was a disease which attracted little attention for a long time, partly because it was so difficult to distinguish from enteric or typhomalarial fever, and partly because of its low mortality rate. Since during the nineteenth century a large fleet was always stationed in the Mediterranean, there are repeated allusions in the naval annual reports to a fever characterised by long intermissions, anaemia and rheumatic pains. The clinical course of the disease was described by Dr. William Burnett in 1816. The Naval Health Report for 1860 records that the "Malta harbour and the adjacent sea seem always to produce an unfavorable effect on the crew", while in 1864 the report carried a detailed account of the infection. The ship-surgeon speaks of "Malta fever as it is ordinarily termed", which was responsible for 611 cases

<sup>&</sup>lt;sup>5</sup> C. Savona-Ventura: Malta and the British Navy: the medical connection during the nineteenth century. *J. Roy Nav Med Serv.*, 1992-93, Part 1:78:p.171-176; Part 2:79:p.33-36; Part 3:80:p.100-105

that year. He described the syndrome as progressive emaciation over a period of weeks and even months, with frequent relapses, and says that it is most common in the summer and early autumn. Quinine he found useless, the only cure being a change of air. He and others thought it was due to the sewage in the Grand Harbour; or since it was similar to enteric or typhoid fever, to a defective water supply, one water tank not having been cleansed for nine years. Further advances in the conquest of the disease were made by the army surgeons. The organism was identified in the human spleen by Col. David Bruce in 1866. In 1904 a commission of inquiry was set up by the Admiralty, the War Office and the Civil Government of Malta. Their report included the findings of Sir. T. Zammit of the Malta Board of Health who showed that the main source of infection was the goat's milk. The suggestion that the transfer of the disease could be controlled by the boiling of milk had a variable response in the civilian population to the effect that little progress was made in controlling the infection in the civilian population compared to the service personnel. Investigations were also undertaken to identify the cause of Kala azar, while studies were undertaken whenever epidemic outbreaks occurred. These studies resulted in the confirmation of Koch's comma spirillum as causing cholera by Bruce and Caruana Scicluna in 1887 and typhoid bacillus as causing typhoid by Dr. M.L. Hughes in 1892 <sup>6</sup>[5].

<sup>&</sup>lt;sup>6</sup> C. Savona-Ventura, 1992-93: op. cit.

The developments in microbiology led to the development of antisepsis and asepsis in surgery and midwifery in the latter part of the nineteenth century, thus reducing the surgical mortality from sepsis. Another important development enabling safer surgery in the nineteenth century was the development of anaesthesia in 1846. A few months after the introduction of ether anaesthesia in the United Kingdom, Dr. Thomas Spencer Wells attempted a partial amputation of the hand under the influence of ether at Bighi Naval Hospital. This was only partially successful because of imperfections in the locally constructed apparatus. A Hooper's inhaler was brought over from England and further operations under the influence of ether anaesthesia were performed successfully. The inhaler and the effects of anaesthesia were demonstrated to Maltese practitioners in a meeting of the Societa Medica d'Incorragiamento. Further developments in anaesthesia on the continent were quickly introduced in Malta. The first anaesthetic fatality occurred in 1855 in a patient undergoing amputation of the finger, while the first abdominal operation was performed by the gynaecologist Prof. GB Schembri in 1890, who in 1891 performed successfully the first Caesarean section on a live woman. The introduction of anaesthesia and asepsis allowed surgeons to become bolder in their interventions. The scope and degree of surgery became greater with the introduction of blood

transfusion and antibiotics, together with the introduction of safer anaesthesia and muscle relaxants in the Second World War period and after <sup>7</sup>[6].

Scientific research over these last two centuries has made contributions of inestimable value to the progress of medicine through pharmacology, immunology, endocrinology, chemotherapy, and investigative methods. The political connection to the British Empire allowed these developments to be introduced quickly. Thus the discovery of X-rays by Wilhelm Konrad Roentgen in 1895 elicited a quick response by local practitioners, so that Prof. T. Zammit experimented with the technique as early as August 1896 when x-ray photographs of inanimate objects were taken. X-ray photographs of the hand were taken in September 1896 <sup>8</sup>[6]. Other diagnostic and therapeutic advances were similarly applied early in both the military-naval and civil hospitals.

Medical science today makes possible treatments that even at the beginning of the twentieth century would have seemed nothing short

<sup>&</sup>lt;sup>7</sup> P. Cassar, 1965: *op. cit.*, p.132-143; C. Savona-Ventura: Reproductive performance on the Maltese Islands during the Second World War. *Medical History*, 1990, 34(2):p.164-177

<sup>&</sup>lt;sup>8</sup> P. Cassar: The first 75 years of radiography in Malta. *St. Luke's Hospital Gazette*, 1972, 7:p.108; P. Cassar: Some early x-ray photographs taken in Malta - postcript. *Mediscope*, 1983, 4:p.14-16

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of miraculous. Physicians are armed not only with the knowledge of disease that is the fruit of study in every corner of the word, they also have truly effective therapies for the great majority of known disease. In principle, powerful drugs, accurate surgery, and hospital equipped with an enormous armoury of diagnostic and therapeutic equipment exist to back up the work of every doctor. In practice, however the organisation of services may not be easily available to every man, woman and child who needs treatment. The World Health Organisation has drawn up a world-wide program "*Health for All by the year 2000*" with three objectives in mind: that of adding years to life, adding health to life, and adding life to years. Malta endorsed this policy document in 1984 and in 1986 initiated a number of measures with the scope of attaining these ends <sup>9</sup>[8].

<sup>&</sup>lt;sup>9</sup> *Health Services Development Plan: Malta 1986-1990.* Department of Health, Malta (1985), +179p.

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