

History of the development of general anaesthesia in Malta

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Introduction

Anaesthesia (*an* meaning absence and *aesthesia* meaning sensation) was a new word coined by Oliver Wendell Holmes, the same doctor who wrote the stories of the detective Sherlock Holmes. The science of anaesthesia means the inducement of a state of reversible unconsciousness and analgesia by means of drugs thus enabling the performance of surgery.

Before the introduction of the science of anaesthesia the only surgery possible was that which could be done in a few minutes with the patient suffering intense pain and needing physical force to be kept lying down on the operating table. After the start of the anaesthetic process, surgery advanced by leaps and bounds during the last one hundred and sixty years. Really the new science enhanced the full development of surgery.

Inhalational Agents.

Among the anaesthetic drugs used pride of place goes to **Ether** which was first used successfully in a planned surgical intervention on the 30th March 1842 by Crawford W. Long in a Jefferson country clinic in the state of Georgia, United States of America. As Dr Long did not publish his discovery it was only four years later on the 17th October 1846 that official news broke out of the undoubted success of Etherisation and the honour fell on the dentist William Thomas Morton of the Boston General Hospital in the state of Massachusetts.¹ It is recorded that the first praise for anaesthesia use came from a surgeon Mr. Warren who painlessly removed a tumour from the neck of an adult patient and then uttered the famous words 'Gentleman this is no humbug!'² News of the pain free operation spread quickly and Ether was used in London by Dr Booth on the 19th December 1846 for a dental extraction and 3 days later for an amputation of the thigh at the University College Hospital. *The Malta Times* of the 26th January 1847 reported news of this method of painless surgery performed under Etherisation.³

Nitrous oxide gas use as anaesthetic agent was a close second option. In 1844 in Hartford, Connecticut the dentist Horace Wells observed 'a frolic' provided by the chemist Gardner Quincy Colton. This referred to the inhalation of nitrous oxide gas prepared by heating ammonium nitrate collected in a leather bag. The youngsters inhaled the gas and then started dancing and laughing in a most uninhibited fashion. During the event, one of the youngsters fell on a stool and despite his injury continued dancing without restraint. He only complained of severe pain when the effect of the gas wore off. All out to improve his dental practice Wells inhaled the gas and submitted himself for a dental extraction carried out by a colleague Mr. Riggs. The procedure was carried out painlessly. Wells attempted to demonstrate the use of the gas at the Harvard Medical School Hospital during the removal of a tumour. The anaesthesia however failed and the patient roared in pain during the procedure.⁴ Mr. Wells never again attempted to use the gas and it was left to others to reintroduce it in practice. It is recorded that the dentist Morton was present during this demonstration and that he was immensely interested to improve the method but eventually adopted ether as a more secure means of achieving anaesthesia. In 1867 the above mentioned Mr. Colton revived the use of nitrous oxide administration with success in dental practice in New York, travelling to the International Medical Conference held in Paris to demonstrate the safety of the gas. After the Paris demonstration the London-based dentist Mr. T W Evans and the Oxford-based doctor Mr. J. T Clover interested themselves in the use of the gas as an anaesthetic.⁵ Nitrous oxide was apparently introduced by Dr P.P. Debono after 1911. By 1938, the gas had been routinely adopted as the anaesthetic of choice in the government hospital.⁶

This introduction would not be complete if no mention is made of the use of **Chloroform** as an inhalational anaesthetic described by the Scottish obstetrician James Young Simpson who used it first on the 10th December 1847. Mr. Simpson had previously used ether with success, but was having problems with the common complaint of the chemical's bad smell, coughing and occasional vomiting. After using chloroform, Simpson never went back to ether since the new agent was easier to produce, had a more pleasant smell, acted immediately and rarely caused vomiting. Instead of the 'rag and bottle' method of ether administration, only a pocket handkerchief and a few drops of chloroform sufficed to put the patient to sleep. As the pioneer of chloroform use was advising its use for pain-free

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labours, there arose objections from radical churchmen who claimed that the new science of pain relief could not be used to ease the labour pains of women as it was against the Genesis 3,16: “To the woman He said, I will greatly increase your pangs in childbearing, in pain you shall bring forth children, yet your desire shall be for your husband, and he shall rule over you.”

This objection notwithstanding Queen Victoria, during the birth of Prince Leopold, asked to be administered chloroform and thus the drug’s use for painless childbirth was sanctioned by the



Figure 1: Sir Thomas Spencer Wells. This portrait hangs in Main Hall of Royal College of Surgeons of England, London (Courtesy Registrar, Royal College of Surgeons London)

Queen. *Chloroform a la Reine* was introduced for pain free confinements first in England and later on all over Europe.⁷

The Early Anodynes

Analgesic substances had been in use for surgical procedure since remote times, these generally be derived from plants. Diocorides (40-90 AD) recommended Mandrake root extracts in a wine base as a pain relief. During the Medieval period, this developed into the *Spongia Somnifera* which was composed of a marine sponge impregnated with mandrake root and belladonna extract dissolved in wine. This was placed in the patient’s mouth to suck and drink during the performance of painful surgery. From the Far East came the introduction of **Opium**, a white salt obtained from the calyx of the poppy plant. The whitish fluid that came out after scratching the poppy head was left to dry *in situ*. This salt was carefully collected on the third day and was used in a solution with wine as a drink – the famous **potcha** used by Roman soldiers – or in solution in olive oil as a local analgesic application. It is documented that before the Crucifixion Jesus was offered a drink of wine called *potcha* to reduce the pain of nailing.⁸ In the tragic play by William Shakespeare *Romeo and Juliet* (Act 4: Scene 1) Friar Laurence gives a potion to Juliet to drink stating that “*Thou shalt continue (asleep) for two and forty hours and shall awake as from a pleasant sleep*”. Pills made from *Opium* powder known as *Pillae Cenaglossa* were known in Malta during the medieval period.⁹

A close second to the poppy seed extract is the use of strong wine (containing 12% alcohol) as a means of pain alleviation. The use of stronger alcohol concentration (Whiskey contains 75% alcohol) as an analgesic agent advanced with the development of distillation to produce a higher alcohol content. Up to two hundred years ago, alcohol was the main analgesic agent in use to treat war injuries. Rum, a strong alcoholic drink obtained from fermentation of molasses, reached Europe from the Americas and was the preferred analgesic potion for seamen.

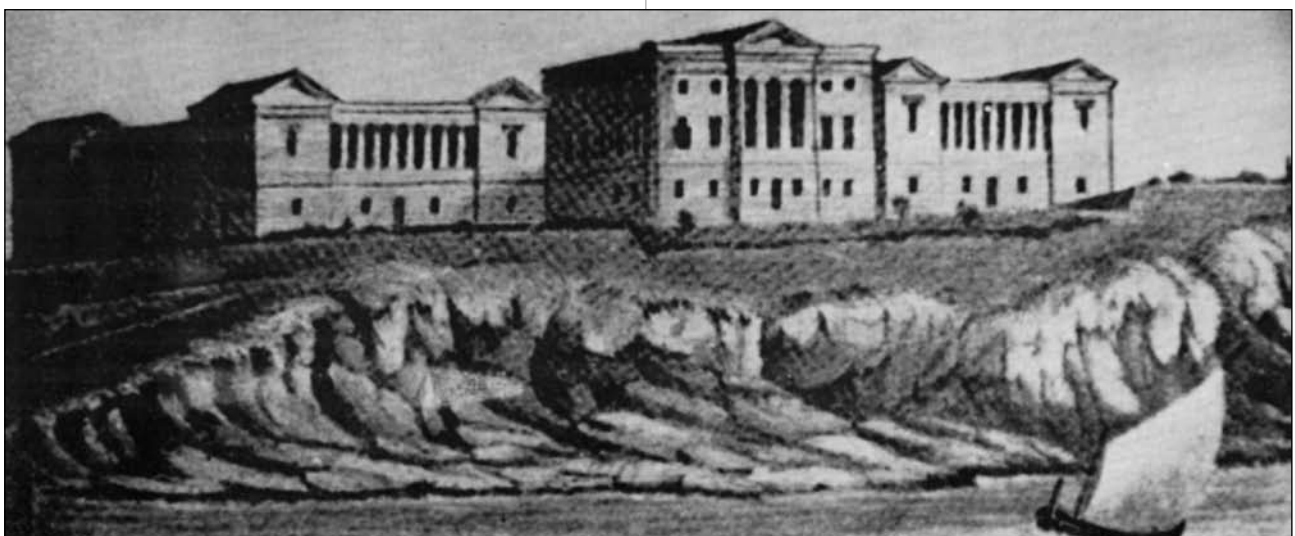


Figure 2: Old print of Bighi Naval Hospital - where the first Etherisation was administered on 25th January 1847

The Late Anodynes

The most active derivative of opium that achieves pain relief is the drug **Morphine** first developed in the laboratories of the German chemist Fredrich W. Serturner in 1806. Morphine was used both in the form of pills as well as intramuscular injection to control pain; but its close relation to vomiting and respiratory arrest somewhat impeded its popularity. In anaesthetic practice, it was used both in premedication as well as during inhalation anaesthesia to help pain relief. Morphine was known to Maltese doctors being documented in use as early as 1843 in private practice. It was used by Dr G.F. Inglott in 1890 for obstetric manipulations.¹⁰ It was also used by Dr Peter Paul Debono in premedication of patients.¹¹ In the late 1970s the Polish anaesthetist Prof. A. Lewinski introduced the use of a morphine-lignocaine mixture in epidural anaesthesia at St. Luke's Hospital in Malta. **Fentanyl**, a synthetic preparation based on the phenandrine molecular structure of morphine came into practice in the late 1970s and introduced in Malta in 1982. It subsequently was in epidural analgesia.

Intravenous Anaesthesia

The hypodermic syringe (Greek *syrinx* meaning pipe) was introduced into clinical practice in 1853 independently by Charles Gabriel Pravaz of Lyon and Alexander Wood of Edinburgh. The introduction of the syringe afforded physicians a new means of administering medications. Emil Fisher and Joseph Friedrich von Mering developed *Diethyl barbituric acid*, called *Veuronol*, in Germany. Its primary use was to make arrested persons speak the truth during the interrogation process. In 1924 it was combined by the French physician Pierre Bardet with *Dially lbarbituric acid*, and the mixture was used to

as an anaesthetics. In 1934, Ernest Henry Volweiler and Donalee Tabern introduced a sulphur analogue of the barbiturates called *Thio pentone*. Luminal was being used in Malta in 1938, while Pentothal was being used by 1952.¹² Because it was easily soluble, reliable in its effect and cheap to produce, this formulation quickly conquered the market.¹³ In time the popularity of this drug was replaced by *Diprivan* (Propofol) in 1977.

Muscle Relaxants

The first preparation of a drug known to cause striped muscle paralysis was available in 1942. This was derived by two Canadian anaesthetists Harold R Griffiths and Enid Johnson from an extract of the South American Coca plant known botanically as *Chondrodendron tomentosum*. In the United Kingdom this muscular non-depolarising drug was studied further and an elaborate formulation of the drugs needed for its reversal was studied. It was introduced in general anaesthetic practice after the end of the Second World War.¹⁴ It is documented that the local use of the muscle relaxant *Tubocurarine* was started by Dr Charles Podesta on his return from the United Kingdom in 1948.

Otto von Dardel working in Sweden elaborated the short acting depolarising muscle relaxant *Suxamethonium* in 1951. This drug did not need any reversal drugs after its use. In 1980 Hughes and Paine introduced the now popular *Atracurium besylate* and claimed that by its temperature and ph difference it would be destroyed in a controlled time in the plasma thereby eliminating the need for reversal drugs and their complications. The author introduced this drug locally through the good services of Welcome Laboratories in 1984. He remembers

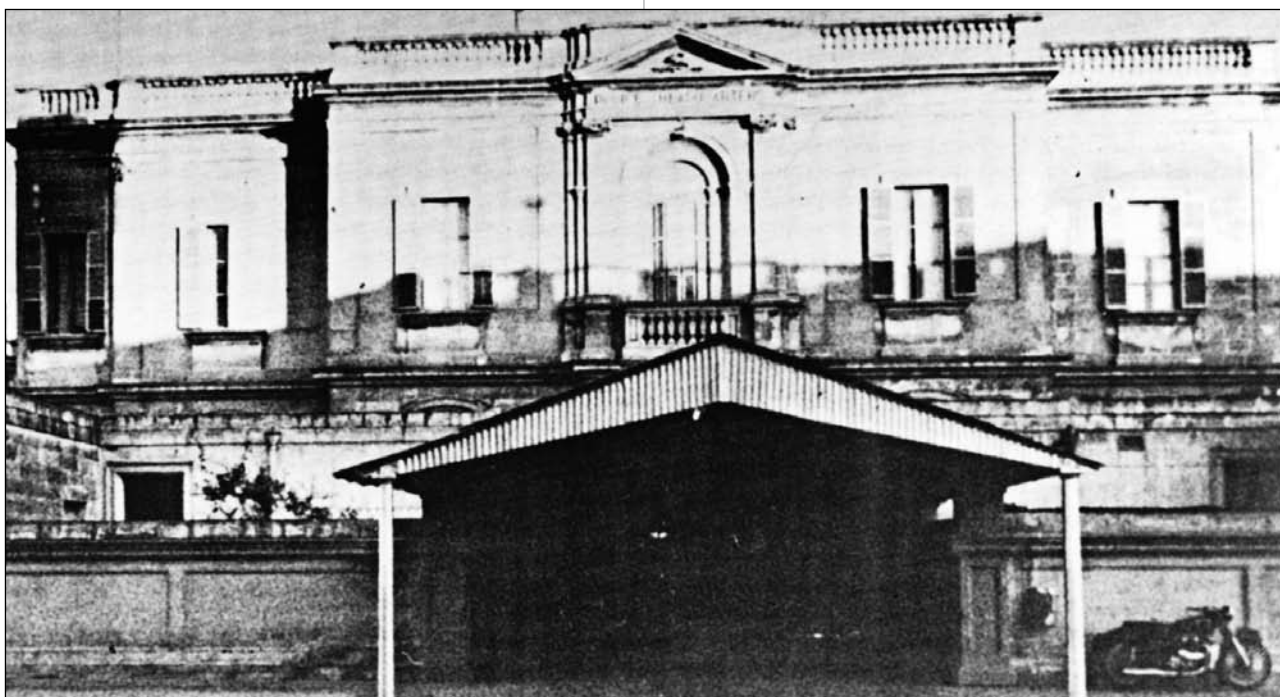


Figure 3: Central Hospital, Floriana. This was for many years the only civilian general hospital in Malta and site where Maltese physicians practised Etherisation

Professor Hughes phoning from London to recommend that the drug be kept continuously in a fridge and also going up to the Luqa airport at midnight to collect the drug that arrived on an Air Malta flight packed in ice and kept in the pilot's cabin for safe keeping.

Acupuncture

The practice of Chinese traditional medicine goes back more than two thousand years ago. The main pain relief method in this science was the use of acupuncture, meaning the use of multiple needle points introduced along meridians drawn on the skin. The Chinese maintain that there are actual acupuncture points in the body that if pricked exert a more lasting analgesic effect. They go so far as to identify certain definite spots in the ear lobes that if pricked will denote internal organ malfunction. There is no exact dating when the first acupuncture was applied as a means of alleviating pain. This science is still unclear in many of its facets but it does work if patients' belief in its function is strong enough. During the last thirty years, China has become a world power and consequently there has developed an awareness of the science of acupuncture. With the discovery of neurohormones in the brain and spinal cord, the modern acupuncturist believes that the analgesic action of acupuncture is due to the release of endomorphines from the hypothalamus and spinal cord.¹⁵ In 1983, Malta was honoured by the arrival of the Chinese Acupuncture Team run by Dr Li Cheug from Nanching Acupuncture and Medical School. Two Chinese nurses accompanied the doctor and they trained Maltese staff in the delivery of the Acupuncture and Moxibustion. Their technique relieved many chronic pain sufferers and helped others to stopping smoking.

Blow on the Head

There was tradition in the Medieval Period for anaesthesia to be induced by enclosing the head in a metal casket and then deliver a strong blow. The consequent concussion of the brain brought about a few minutes of unconsciousness and perforce analgesia. But this method was too brutal to succeed in practice and concussion of the brain was not without danger.

Anaesthetic Practice in Malta

The first recorded delivery of general anaesthesia in Malta occurred at the Naval Hospital in Bighi on the 6th March 1847, this etherisation being delivered by the young medical officer Thomas Spencer Wells who was later to become a famous surgeon and Head of the London College of Physicians and Surgeons. It is to be noted that only three months had passed since the first described London Etherisation. In the Bighi Naval Hospital, a marble tablet records the event. A Hooper Inhaler was used for this first delivery of *Ether* in Malta.¹⁶ This was a marked improvement on the original 'rag and bottle' method of delivery. The Hooper inhaler was developed in London and consisted of a glass bottle containing a sponge kept soaked in ether, while the patient drew over air and ether vapour from a tube placed in his mouth. The same device was used with minimal

adaptation in the following year for delivery of chloroform. On the 23rd March 1847, another naval medical doctor Alfred J. Burnmeister published an account of the methods and effects of Etherisation in *The Malta Times*; while Dr Spencer Wells did his best to propagate the science among local doctors giving etherisation demonstrations to members of the *Societa Medica di Incoraggiamento*. One year after the introduction of ether in Malta, on the 4th March 1848, the Maltese periodical *II Filologo* reported on the use of *Chloroform* in London. The use of *Chloroform* in Malta probably followed the same pattern as that of *Ether* being first used in the Military Hospitals and later on in the Central Hospital.

The First Anaesthetic Death in Malta

On the 20th April 1855 *The Malta Mail* reported that following the use of chloroform for a toe amputation by the English Dr Sankey in a house in Senglea, a strong man of thirty five had "a trembling pulse and the blood ceased to flow and he expired without a groan". Dr Sankey called for help the Professor of Surgery Charles Galland but despite their efforts to resuscitate the patient he was pronounced dead. The effect of this calamity was an order issued by the Military authorities of Malta that there had two doctors present to perform an operation, one to occupy himself with Etherisation only while the other carried out the surgery. Later on a second order recommended that two doctors were to attend to the needs of the etherised patient, one to monitor the pulse and the patient's colour only while the other



Figure 4: Hooper ether inhaler

occupied himself with the administration of the anaesthetic.

In February 1882 at the Central Hospital School of Nurses in Floriana, a course of training and a syllabus of studies on etherisation was initiated. This course was directed to instruct nurses on the preparation of patients for the procedure, and also how to deal with any mishaps that may be encountered. Gradually with the introduction of chloroform and later on nitrous oxide gas, the term etherisation had to give way to Anaesthesia as the new inhalational science was now named.

The Maltese Contribution

It appears that the obstetrician Giuseppe Batta Schembri, the incumbent Midwifery professor between the years 1880-1904 at the Central Hospital in Floriana, performed laparotomies and a Caesarean section under chloroform anaesthesia in 1890-1891. Four Resident Medical officers were trained and later appointed to administer chloroform at the Central Hospital.

Following the return of the London trained surgeon Peter Paul Debono to the Central Hospital in 1911, the practice of anaesthesia advanced greatly. This young doctor was well gifted and was successful in whatever aspect of medical practice he undertook. At that time anaesthesia formed part of the surgical training programme and the use of the Clover equipment for ether delivery formed part of the curriculum of surgical studies. In 1926 he was promoted to the Professorship of Surgery, and for 25 years advanced the knowledge of both specialties. With

the outbreak of the First World War in 1914 he was appointed surgeon at the Naval Bighi Hospital and there met the Kings College Medical School anaesthetist Dr Silk who further instructed him on the latest techniques of Spinal Analgesia.

The time had finally arrived for the appointment of the first Maltese full time anaesthetist. In the official Maltese medical records published on the 20th June 1919, the name of Dr Emmanuel Vella is registered as the first Maltese anaesthetist with obligations to teach the specialty to young doctors. This experienced anaesthetist had been trained at the Bighi Naval Hospital by Surgeon Colonel Sir Charles Balance. On the 22nd May 1922, Dr Vella was succeeded by an Army-trained surgeon Dr George Busutil and in 1929 by Dr Richard Louis Casolani. The Government of Malta sent Dr Casolani to St. Bartholomew's Hospital, London to specialise in anaesthesia. There, he learnt about the use of the Boyle's machine, the use of the Nitrous Oxide gas, and also the method of intubating patients using gum elastic catheters and a secure throat pack. After three years Dr Casolani left Government employment and returned to the Royal Army Medical Corps as a Surgeon.¹⁷

On the 19th July 1932 Dr Edward Critien, another St. Bartholomew's Hospital-trained man was officially appointed by the Government as Anaesthetist and Demonstrator in Anaesthesia by the Royal University of Malta. He had the onerous task of organising a team of young doctors to help him administer anaesthesia to the many casualties of the Second World War. Among the trained doctors during the war years were Charles Podesta, Joseph Psaila and Francis Darmanin Demajo. After the end of the war in 1945, Dr Psaila went to the United Kingdom for further training; while Dr Podesta furthered his training in Dublin. After the end of war, Dr Podesta returned to Malta and introduced the use of *Intocostarin* as a muscle relaxant. In 1948 he was appointed Senior Anaesthetist with the Malta Government and Demonstrator in the specialty with the Royal University of Malta, a post he occupied till he retired in 1971. He brought over to the Central Hospital his expertise in the new science of anaesthesia and taught junior doctors the technique of using the *Ether bomb*, the *Chloroform* bottle, the *Boyle machine* and the intravenous use of drugs such as *thiopentone* and *Tubocurare*. His Diploma in Anaesthesia was upgraded to Fellowship of the Royal College when the Anaesthetic College was established in Dublin.

Dr Joseph Psaila gained his Diploma in Anaesthesia at the Radcliffe Infirmary of Oxford where he worked under the direction of the famous Sir Robert Mackintosh. He was well versed in the use of new inhalational agents such as *Halothane* and the muscle relaxants *Suxamethonium* and *Gallamine*. His diploma was upgraded to Fellowship when the Anaesthetic College was set up in England. He was appointed Head of the Department and Lecturer in 1972, holding the post until he retired from Government service in 1974.

Dr Francis Saviour Micallef FFARCSI in his young medical days was employed with the Colonial Service and later on trained in anaesthesia under Cecil Grey and the

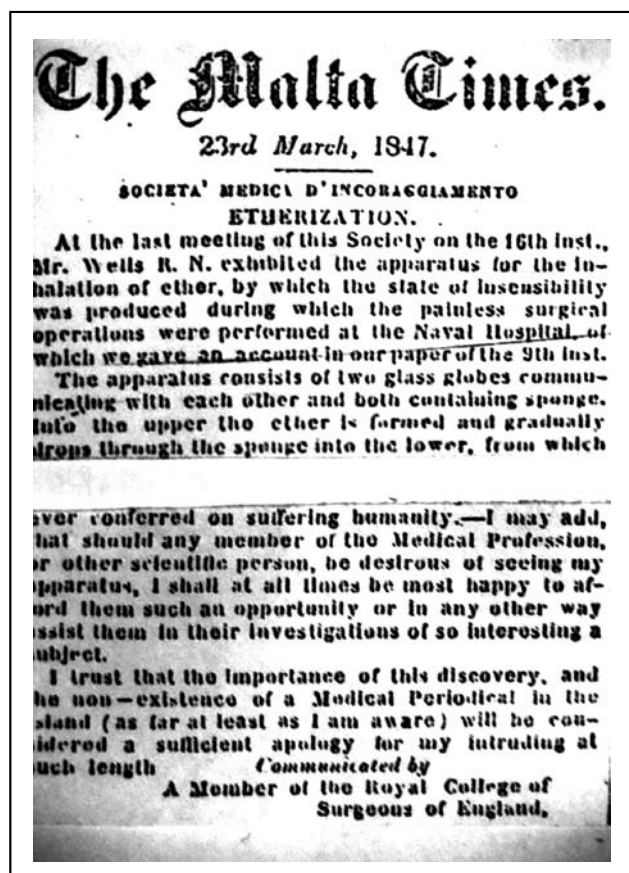


Figure 5: The Malta Times. Edition of 26th January 1847 reporting the first Etherisation in Malta (Courtesy Bibliotheca Ivrarjonall Valletta)

paediatric anaesthetist Jackson Rees in Liverpool. He obtained the Fellowship in Anaesthesia from Dublin in 1969. He was appointed Head of the Departments of Anaesthesia and Intensive Care in 1974, a post he retained until he retired in 1990. During the period 1977-86 because to a trade union action, he had to leave the government and university joint post and seek employment overseas.

Dr Walter Cuschieri D.A. was appointed consultant anaesthetist in 1971 soon after returning from his training abroad. After 1975, he was involved in the setting up of the Intensive Care Unit at St. Luke's Hospital which was officially opened in April 1976. He had to leave government employ during the trade union action of 1977-86 and subsequently rejoined the service. On his retirement in 2001, he stipulated in his will a sum of money to be awarded to a young doctor who desired to proceed to study anaesthesia abroad, nominating the prize the Ann Dorothy Cuschieri Fund.

In 1974, the health department decided to augment the anaesthetic services to the island of Gozo and created the post of Consultant Anaesthetist at Craig Hospital of Gozo. Dr George Boffa FFARCSI was the first incumbent. Dr Boffa was appointed to the post of Consultant Anaesthetist in Malta in 1976. The consultant anaesthetist post in Gozo, with the additional duties of Superintendent of the Craig Hospital, was awarded to the author Dr Nazzareno Azzopardi.

The health services in the Maltese Islands underwent a tremendous upheaval during the 1977-86 doctors' industrial action. While many of the consultant anaesthetists in government employ proceeded overseas, their departure overseas allowed the "importation" of a number of foreign specialists, while the Health Department initiated a series of services that necessitated the expansion of the anaesthetic services. The present writer was in due course appointed Head of Anaesthesia and Intensive Care as well as Lecturer in the specialty by the University of Malta; a post he retained until he finished Government service in 1991. The end of the industrial action in 1986 required that the head of the Department of Anaesthesia was to revert to the pre-1977 incumbent - Dr F.S. Micallef.

The advances in medical services during the 1980s and 1990s required the practice of anaesthesia to advance in order to cater for cardiac surgery, renal transplantation and spinal surgery. A Heart-Lung machine was installed in the upgraded and refurbished St. Luke's Hospital Operating Theatre suite. The Intensive Care Unit mushroomed to ten beds and a separate Intensive Care Paediatric unit was commissioned. Further post-operative wards were set up in the main operation section at St. Luke's Hospital. A new extension to the general hospital – Karin Grech Hospital – was fully commissioned by 1980. This new hospital had three additional Operating Suites, a postoperative Recovery Ward, and a Labour Ward and minor gynaecology operations theatre. All these new additions required additional anaesthetic manpower and the Anaesthetic Department slowly grew from four Consultants and four Registrars to twenty-four specialists catering for the needs of the Saint Luke's, Karin Grech and Craig Hospitals.

Dr Carmel Pirotta FFARCSI was appointed Chairman of Anaesthesia and Director of Intensive care in 1991. During his tenure, the Day Care Surgical Unit was started and plans were being prepared for the building of the Mater Dei Hospital. He resigned his post in 1999. He was succeeded by Dr Joseph Zarb Adami FFARCSI who is the present incumbent of this onerous post. Dr Zarb Adami was heavily involved in the commissioning of the Operating and Intensive Care suites of the new hospital.

Further Development of the Anaesthetic Practice

Patient Ventilation

At the end of the Second World War, an epidemic of Acute Poliomyelitis effected many young people throughout Malta and Gozo. It is thought that the microbe was imported by Canadian pilots assigned to work in Malta. Polio is a feverish disorder accompanied by muscular paralysis. This paralysis is at its worst in the first few days but then starts to become less and less severe and may even pass off without leaving any permanent paralysis. But the clinical picture is usually one of permanent paralysis of one or more limbs. When it paralysis the intercostal muscles of respiration, breathing is seriously interfered with and the patient may die unless his respiration is assisted throughout the acute phase of the disorder. This assistance entails constant pulmonary ventilation during the time the acute phase of the disease lasts. An Iron Lung Ventilator was brought from London and donated to the Government of Malta for use in the Isolation Hospital at Manoel Island. This ventilator was operated by the intermittent inflation of an elastic bag placed inside a leather cuirass that was fixed round the patient's chest. The inflation of the elastic bag compressed the chest wall and air was expelled from the lungs – the expiratory phase. The natural recoil of the chest wall sucked in air – the inhalation phase. The air for inflation of the elastic bag was produced by an electrically operated bellows placed inside a tank. Facility for the pump to be operated by a hand crank was also provided as in those days electrical failures were quite common. This Iron Lung Ventilator necessitated constant medical attendance but quite a few patients were saved through it. The only patient monitoring available at the time was limited to pulse recordings and blood pressure readings either by the mercury sphygmomanometer or by the Riva Rocci two elastic bag anaerobic manometer.

In 1948 the muscle relaxant drug called *Tubocurarine* started being used in the Government Hospital by Dr C. Podesta who was the first anaesthetist to have learnt the way to use it properly during his work in Ireland. With *Tubocurarine* in anaesthetic practice the intubation of patients was facilitated and manually ventilation, usually with facility for carbon dioxide removal (Waters cannister) was introduced in anaesthetic practice. Anaesthesia was now progressing by leaps and bounds and the practice of extensive surgery was stimulated. An electrically operated mechanical ventilator was introduced in St. Luke's Hospital in the early 1960s. This was as big as a commode and very, very heavy to move around. Of course its use was reserved only to the Chief Anaesthetist. Later on other

smaller versions of Intermittent Positive Pressure ventilators arrived on the Island.

Spinal analgesia was introduced before the war years by the young Dr P.P. Debono. Epidural analgesia was gradually introduced in the 1980's by foreign anaesthetists working in Malta. This science progressed to the technique of Continuous Epidural Service for labour and delivery, and long-term relief of cancer pain.

Patient Monitoring

The introduction in the early 1960s of the electrocardiogram monitor helped enormously to warn the anaesthetist of impending crises. This device at first limited to oscilloscope viewing of the heart electrical activity was subsequently replaced by a paper recording device. However the ECG was quite an advance on the pulse monitoring, colour of the skin and mercury blood pressure recorders then in use. The invasive blood oxygenation and carbon dioxide tension method of patient monitoring during Anaesthesia and Intensive Care was originally initiated in Denmark in the late 1960s and a chart had to be worked out in order to report the findings. The use of this invasive technique gradually gave way when the pulse oxygen monitor became available. This useful tool, combined with breath-by-breath monitoring of the expired carbon dioxide tension, were by far the greatest break through in patient monitoring.¹⁸

Intensive Care Therapy

Dr W. Cuschieri was the Senior Consultant who in 1976 was put in charge of organising and commissioning the Intensive Care Unit at St. Luke's Hospital. At first the Unit held only four beds and only twenty-four hour rosters for nurses were set up. Medical attention was managed by the anaesthetist on call. Gradually as the number of beds increased to ten, the appointment of an anaesthetic cover for all twenty-four hours was organised. In recent years a High Dependency Unit has been set up to cater for the extra care needed by some patients after extensive surgery.

Association of Anaesthesiologists of Malta

The Association of Anaesthesiologists of Malta was set up by a group of local and foreign specialists in 1983. The first President was Dr Nikola Boskovski, the Secretary Dr Nazarene Azzopardi and the Treasurer Dr David Spiteri. The Association included a special section for the Anaesthetic Nurses. Within a year of its inauguration, the Association published its journal *The Acta Anaesthesiologica Alelitenisia* which continued with annual publication for six years. Following this publication, there was an exchange of journals and other periodical dealing in the Speciality with various Anaesthetic organisations both in Europe as well in America. Between the 18th-19th November 1983, the new Association organised the first International Anaesthetic Conference. The inaugural meeting was graced by the presence of the President of the Republic Miss Agatha Barbara.

During 2003, the 22nd Congress of the European Society of Regional Anaesthetists and Pain Management was held locally. This Congress was attended by over seven hundred specialists. In 2004 the first Malta Israel Anaesthetic conference was successfully organised. World Anaesthesia Day is celebrated on the 15th October.

Anaesthetic Teaching Practice

Until 1977, aspiring Maltese anaesthetists received their postgraduate training in the United Kingdom. The loss of recognition of the Malta medical doctorate diploma during 1997-86 required the establishment of contacts with other European universities to enable the postgraduate training of future anaesthetists. Contacts were established with two Belgian Medical Schools –the Universite Libre de Brussel and the Katholike Universiteit of Leuven – who offered a curriculum of postgraduate anaesthetic studies. Dr David Spiteri was the first candidate who benefited from this recognition and was certified a specialist anaesthetist in 1988. The European Diploma in Anaesthesia was subsequently set up and eventually was recognised locally by the Malta Medical Council as being equivalent to its U.K. counterpart. Maltese anaesthetist trainees started opting for the European diploma. After Malta joined the European Union, the qualifying examinations for the European diploma started being held locally. In addition, Advanced Life Support courses, at first run by the U.K. Medical Schools, are also being organised locally to the great benefit of local medical and nursing trainees.

References

1. H.B. Gardner. A Manual of Surgical Anaesthesia, Baillière Tindall, London, 1916, 8.
2. J.A. Lee and R.S. Atkinson. A Synopsis of Anaesthesia, Butterworth-Heinemann, Bristol, 1964, 2-3
3. C. Savona-Ventura. Contemporary Medicine in Malta (1798-1979), P.E.G. Ltd., Malta, 2005, 453.
4. R.S. Atkinson, G.B. Rushman, and N.J. Davies. Lee's Synopsis of Anaesthesia, Butterworth-Heinemann, Oxford, 1993, 132.
5. J.A. Lee and R.S. Atkinson, op. cit., 3
6. Savona-Ventura, op. cit., p.457-458
7. H.B. Gardner, op. cit., 13.
8. P. Cassar. A History of Anaesthesia in Malta, Acta Anaesthesiologica Melitensia, 1984, 1/2:10.
9. F.J. Sheen. Life of Christ, Image, New York, 1977, 370.
10. C. Savona-Ventura. Analgesia and Anaesthesia in Malta. A Historical Review. Journal of EuroMed Pharmacy. 1996, 1(4):20-25
11. C. Savona-Ventura. Outlines of Maltese Medical History, Midsea Publ., Malta, 1997, 67.
12. J.A. Lee and R.S. Atkinson, op. cit., 11
13. J.A. Lee and R.S. Atkinson, ibid, 15
14. W. Lowe. Introduction to Acupuncture, Medical Examination Pub. Co, Flushing NY, 1973, 25.
15. A. Goodman Levy. Chloroform Anaesthesia. London, 1922, 130.
16. P. Cassar. Medical History of Malta, Wellcome Publ., London, 1964, 545.
17. P. Cassar. Forty Years of Anaesthesia in Malta - Richard Louis Casolani. Acta Anaesthesiologica Melitensia, 1983, 1/1:35.
18. R. Dripps, J. Eckenhoff, and L.D. Vandam. Introduction to Anaesthesia, Saunders, Philadelphia, 1982, 446.