The Polio Epidemic in Gozo

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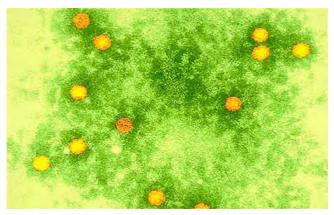
Introduction

Polio was a disease feared by many during the last century. This infectious illness was more common over the warmer months of summer. Many of those who were stricken recovered quickly as they would have had only temporary paralysis but a number of them suffered from permanent paralysis and even death. Many Gozitans remained disabled for life after contracting polio which struck the island during World War II. They are a reminder of the great burden that this disease had on society and on the lives of many people.

"Polio" is the common name for poliomyelitis. The term is derived from the Greek poliós (π ολιός), meaning "grey", myelós (μ υελός), referring to the "spinal cord" and the suffix -itis, which denotes inflammation (Chamberlin and Narins, 2005: 1859–70). For a time polio was called infantile paralysis although this disease did not affect only children.

Types of Polio

Polio is caused by one of the three viruses which are members of the genus enterovirus that affects the central nervous system. In approximately ninety-five percent of cases, the person has no symptoms at all. These are known as asymptomatic cases. The remaining cases of polio can be divided into three types: abortive polio, non-paralytic polio, and paralytic polio. The acute phase usually lasts



Polio virus x350,000 - © Dennis Kunkel Microscopy, Inc. (Source: http://pathmicro.med.sc.edu/mhunt/rna-ho.htm - Nov 2012)

about a week. This is the most critical time for the patient because it has many symptoms including high fever and even convulsions (Agius, Bartolo, Coleiro and Seddon, 1945: 759). Thus at the onset of the disease it was not easy to diagnosis because the symptoms were similar to other common diseases such as meningitis.

In the abortive polio type the disease was mild. The symptoms included fever, fatigue, headache, sore throat, nausea and diarrhea. These symptoms lasted for a few days and then everything disappeared quickly. In non-paralytic polio cases, the symptoms were typically those of abortive polio, but also included neurological symptoms, such as sensitivity to light and neck stiffness. In the case of paralytic polio the patient, after an initial period of symptoms like those mentioned, also had definitive neurological symptoms. These included a lack of superficial reflexes and muscle pain or spasms. The paralysis was not usually the same on both sides of the body and one to two percent of people remained paralyzed. In many cases the patient recovered completely however a certain number of people had paralysis or muscle weakness for life.

Polio is a highly infectious disease that spreads from person to person through the nasal and oral routes and by contact with contaminated water. The virus enters the body through the mouth and passes into the digestive system where it then multiplies. Unfortunately there is no cure for polio even today, so prevention is the most effective means to combat it. Certain medications and therapies can offer supportive care to patients against some of the effects of muscle involvement. Patients who get paralysis of the muscles involved in breathing will need to be placed on an artificial breathing machine for the period it takes for the muscles to recover. In serious cases of polio where the lung muscles are affected, thirty percent of sufferers will not recover and will eventually die. In Malta fifteen people died in the acute phase of the disease, fourteen of them due to muscle paralysis of the lungs and the other due to a convulsion (Agius, Bartolo, Coleiro and Seddon, 1945: 761).



Polio is a viral, infectious disease which can lead to paralysis or even death.

Due to effective vaccines against the disease, polio was eliminated from the western world in 1994. Today it is still found in a few countries like Afghanistan, India, Nigeria and Pakistan (WHO, 2011). Vaccination against polio started in Malta in November 1956 (Savona Ventura, 2005: 73). By 1959 thirty-four thousand people in Malta and Gozo had been vaccinated. In 1961 they began to use a new vaccine which was more effective (Savona Ventura, 2005: 74).

Polio in Ancient Times

Polio has existed for thousands of years. In Egypt they found carvings on an old stone dating from around 1500 BC which shows people with deformed and shrunken limbs (Daniel and Robbins, 1997: 5-22). These carvings depict the characteristics of polio.

In ancient times there were epidemics of this disease due to lack of cleanliness. When hygiene started to improve in the rich countries of Europe and America and after the sanitary reforms of the nineteenth century and early twentieth century, the disease began to decline. But these epidemics have had dramatic effects on family life and societies at a time when infant mortality was high. One must say however that the epidemics were indeed numerically small compared with the epidemics of cholera, typhoid and smallpox in the nineteenth century (Porter, 2002: 78).

The old name for the disease, infantile paralysis, reminds us of when it was primarily a disease of infants and very young children and its outcome was paralysis of the muscles affected. The picture of the child with polio was immortalized by the classical English writer Charles Dickens in the character of Tiny Tim in his novel, *A Christmas Carol*.

Polio in the Maltese Islands

In Malta and Gozo there were only a few cases of polio before 1942 when there was the first outbreak. The polio disease was one which fell under the law of protection from infectious diseases, Cap 36 of 1908, and therefore each doctor was obliged to report every case he had under his care. This law took effect in 1921 (Cassar, 1964: 264). The largest epidemic occurred between November 1942 and June 1943 (Agius, Bartolo, Coleiro and Seddon, 1945: 759). Altogether during this period there were 436 reported cases. Then there was another outbreak in 1950 (Savona Ventura, 2005: 73).

In Gozo the outbreak began in the first week of December 1942 and lasted until February of the following year. In 1950 there was another outbreak that began towards the end of August and lasted until the end of December of the same year. The last case of polio was reported in 1964 in Malta (Savona Ventura, 2005: 73). In Gozo between the 4th December of 1942 and the 29th December of 1962, a hundred cases were reported.² The largest number of cases was in 1942 which numbered thirty-five in all. In 1943 there were only five cases, and in 1945 there were no cases at all. But in 1946 and 1947 there were eight cases each year. In 1948 there was only one case but in 1950 the disease recurred because twenty-one cases were reported. From then on one to three cases a year were reported until 1962.

The disease had spread all over Gozo but the largest number of cases was in Victoria where eighteen cases were reported. Fifteen cases were reported in Nadur and eleven in Ghajnsielem. In Sannat and Munxar two cases were reported in each village. The age ranged between infants of five months and children of fourteen years but the majority were all

¹ Infectious Diseases Register, Public Health Office Archives, Gozo.

² Ibid.

young children under five years of age.³ The two doctors found most frequently listed in the register of infectious diseases were Dr. Alfred Cauchi who practiced mainly in Victoria and Dr. Salvino Debono whose practice was in Nadur, Għajnsielem and Qala.

Nobody knows how this disease came to the Maltese Islands however it was thought to have been introduced from abroad by the British soldiers who were here during the war, the reason being that over this period there were fifty-seven people working with the Services who contracted the disease (Agius, Bartolo, Coleiro and Seddon, 1945: 759). In Gozo at least as far as it is known, there were no British personnel affected with this disease apart from one. Peter Mather AC 2 RAF who was twenty-two years of age, was reported as a suspected case, although this was not confirmed, on 16th October 1950 by Dr. Alfred Cauchi.⁴ One must remember that the war brought much poverty, starvation and poor hygiene and the mingling of people in shelters could have been the main reason why the disease spread throughout Gozo.

After the Epidemic

Thankfully according to the register of diseases, none of those afflicted with the disease in Gozo died in its acute phase. This was mainly due to the cooperation that existed between the civil and medical service. However the disease did leave many people paralyzed. Consequently the Department of Health requested the assistance of Professor H. J. Seddon, who was the professor of orthopaedics at Nuffield College at the University of Oxford in England, who came over to Malta to assist in the establishment of a department of orthopaedics and physiotherapy. It should be noted that this cooperation between the Health Department and the Orthopaedic Centre in Nuffield still exists today. Twice a year a professor of orthopaedics comes to Malta to see patients who require specialised treatment at the Nuffield Orthopaedic Centre in Oxford. Even a number of Maltese doctors go to Oxford to specialise in the field of orthopaedics.



Oral administration of the polio vaccine.

Due to the lack of mobility that this disease caused a number of physiotherapy units were opened around Malta and Gozo. The health department also brought two British physiotherapists to the islands since at that time there was nobody here in Malta specialised in this field. Gradually the department of physiotherapy began to take shape as four other British physiotherapists came to Malta, and the British Red Cross and the Sovereign Military Order of Malta provided appropriate equipment to give massages and care to children affected by the disease. A number of female nurses were also sent to England to train as physiotherapists (Savona Ventura, 2005: 482).

Orthopaedics as a Speciality

From this brief study we can see that medicine in Malta has always been kept up-to-date and abreast with the advances that were occurring outside the country. So much so that the vaccine was introduced in Malta soon after it was developed in 1952 and later tried on humans in 1954.⁵ By 1964 the disease had vanished from our country and today it is just a part of history. We also saw how the presence of a particular disease came to create the Department of Orthopaedics. The first professor of orthopaedics was Dr. Alfred J. Craig. Concurrently the Department of Physiotherapy was set up at the Central Hospital where today there is Bugeja's Institute. This was an important step because these physiotherapists who were trained by British experts were of great

³ Infectious Diseases Register, Public Health Office Archives, Gozo.

⁴ Ibio

⁵ "History of Polio," in *History of Vaccines* – A Project of The College of Physicians of Philadelphia. Source: http://www.historyofvaccines.org/content/timelines/polio – accessed on 12/4/12.



The Palace of Verdala, one of the residences of Governor Sir Edmund Schreiber, which temporarily served as an orthopaedic hospital for patients who were ill with polio.

help to those patients who had muscle problems due to polio. Physiotherapy is also very important for the treatment and rehabilitation of many other diseases. In the case of patients affected by polio, the care needed was long term and required a lot of patience from both the physiotherapist as well as the patient.

Conclusion

The personal experiences of some of the people who fell ill with polio in Gozo were quite different. One must say firstly that polio was fairly new to Malta and doctors at that time knew very little about the disease and its management. Secondly there was no cure for it and the only treatment was isolation in order to prevent the spread of the disease and physiotherapy to prevent complications as much as possible. But the number of physiotherapists was very small compared to the demand. As always things in Gozo were much worse and patients were sent over to Malta away from their families. Many of the patients I spoke to personally told me that almost all polio sufferers were taken to St Luke's Hospital in Malta, which was still being built at the time. After that they were transferred to the Palace of Verdala, one of the residences of Governor Sir Edmund Schreiber, which temporarily served as an orthopaedic hospital for patients who were ill with polio (Cassar, 1964: 263). The patients were kept in Malta for a number of years but unfortunately little care was given to them. According to some of the patients I spoke to, once they arrived at the Palace of Verdala, they were put in a cast and dumped in a bed without being given physiotherapy or any

other treatment. In fact some of the parents did not like this situation and asked the health authorities to bring their children back to Gozo to be looked after by themselves. Some patients still living today told me that their parents used to take them to Frenc tal-Gharb, the charismatic person, who advised them on how to give massages to their children.

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