A History of Gastroenterology in the Bahamas

Harold A. Munnings Jr.

© Dr. Harold Munnings
Grosvenor Medical Centre, PO Box SS 6587
Nassau, Bahamas.
http://www.haroldmunnings.com

A History of Gastroenterology in the Bahamas

Introduction

Gastroenterology is the study of digestive disorders and a gastroenterologist is a physician who specializes in the diagnosis and treatment of digestive diseases. The first gastroenterologist in the Bahamas began practice here in 1985, but digestive disorders have been diagnosed and treated for as long as the Bahama Islands have been inhabited.

Pre-1800 treatment of digestive diseases

Native Lucayans, who were the first inhabitants of the Bahama Islands, suffered their share of digestive diseases; particularly amoebic dysentery, worm infestation, yellow fever and dengue fever. They isolated their sick in a separate hut, where, they were frequently bathed and placed on a diet of cassava with no meat or fish.

Christopher Columbus introduced European medicine to the new world when he arrived in 1492 with a physician aboard each of his three ships. The harsh and ineffectual remedies of European physicians often did their patients more harm than good and the sick would have fared better under the gentle principles followed by the Lucayans. Ironically, the European physicians regarded Lucayans as primitive savages.

Amongst the Lucayans, digestive diseases soon took a back seat to smallpox, measles and influenza, introduced from Europe, which along with cruel

enslavement decimated their population. Within twenty-five years of Columbus' first contact all the Lucayans were gone. The Bahamas subsequently remained uninhabited for one hundred and fifty years until 1647, when Captain Sayle landed on the Island that the Lucayans called 'Cigatoo' and renamed it 'Eleuthera'.

Gastroenterology in the 18th & 19th century

The population of the Bahamas trebled between 1783 and 1788 with the influx of Loyalists and their slaves and digestive diseases took their toll, particularly amongst slaves, who lived in poor and crowded conditions.

One of the earliest written accounts of medical practice in the Bahamas during the slave era comes from Dr. P.S. Townsend. He came from New York and spent a year in the Bahamas. In 1968, his diary was published by the Bahamas Historical Society under the simple title *The Diary of a Physician from the United States visiting the Island of New Providence 1823-4*. The diary included notations on treatment of digestive diseases. For example, on June 28, 1824, he attended to a Mrs. Benneber Berry, landlady of a boarding house, who was suffering from dysentery; on July 14th he visited a Mrs. Watkins of Eleuthera and treated her dyspepsia with aloe.

Dr. Townsend's medicines included Tamarind water, Rat root, Sarsap [sic] and Milkweed. In addition, he extensively used cathartics and enemas for the treatment of a variety of conditions, as was accepted medical practice in his day. A remarkable notation in the diary referred to a poor Miss Matilda

Demerritt, who suffered from a hoarse voice, difficulty swallowing and cessation of menstruation, all as a result of advanced syphilis. The doctor sliced open a scalp artery and let her bleed out a pint or so of blood and then gave the depleted woman a potent concoction of brandy and cayenne pepper to drink.

Gastroenterology in the 20th century

Digestive diseases such as gastroenteritis, typhoid fever and tuberculosis killed many residents of the Bahamas right up to the late 1900s. The earliest scientific account of digestive disease in the 20th century came from Dr. Clement Penrose, a Baltimore medical professor who in June of 1903, led a medical team from John Hopkins University to the Bahamas.

Dr. Penrose traveled to the Bahamas aboard the one-hundred-ton schooner 'Van Name' along with three of his medical students on an expedition that was sponsored by the Baltimore Geographical Society. The schooner had been carefully disinfected before they set out and the team came impressively equipped, carrying surgical instruments, a full laboratory, a pharmacy and a medical photographer. They visited New Providence, Abaco, Andros, Green Cay, Eleuthera, Cat Island, Long Island, Rum Cay and Watlings Island.

Dr. Penrose and his assistants visited The New Providence Asylum, which locals called the 'Pauper Hospital' on several occasions in order to photograph and examine patients. They were fascinated by the prevalence of leprosy and marveled that the patients freely roamed about the hospital

compound. Dr. L. Parsons, the physician-in-charge, gave the enthusiastic visitors permission to take blood samples from patients and on several occasions they called at midnight to collect specimens that they examined for filarial parasites – a blood worm that in certain species, only circulates at night. They successfully detected a harmless variety in a man from Long Island.

The Penrose group submitted a detailed report that occupied a two hundred and eleven page chapter of the tome published by the expedition in 1905. In it they reproduced some of the New Providence Asylum statistics for 1902 and they showed that diseases of the digestive tract were at the top of the list.

> A daily average of forty-nine men and forty-seven women in hospital with cases treated: 'digestive diseases 49, injuries 31, tuberculosis 30, circulatory diseases 30, tertiary syphilis 15, eye diseases 11, leprosy 9, and five each of cancer and alcoholism'. Practically all of the cases are from the poorest class of inhabitants of the Islands and required a certificate, usually that of their minister, before they could gain admission to the institution". *Penrose Report, 1905*

The lax approach of the government to these highly prevalent and infectious diseases did not change until 1927, when typhoid fever struck ten American visitors to New Providence at once and one of them died. The tragedy caused the government to obtain the services of an expert in public health to evaluate healthcare in the colony and to make recommendations.

Sir Wilfred Beveridge, an eminent teacher and scholar whose fame was cemented later as the architect of the British National Health Service, was engaged for the task. He spent a month in Nassau during which time he

roamed widely: he visited Bain and Grants town, the Hospital, the Jail and the Blue Hills water works then under construction. Sir Wilfred's seminal report entitled *Report of the Public Health and on Medical Conditions in New Providence, Bahama Islands* was presented to the Governor in September of 1927. He reported that health statistics were sorely lacking and this was compounded by the fact that dengue fever, paratyphoid fevers and dysentery were not on the list of notifiable diseases. Under the existing system it would not have made much of a difference, for Sir Wilfred discovered that when a case of measles, mumps, tuberculosis or whooping cough was brought to the attention of the authorities, no action was taken. There was no registration of the cause of death and no death certificate whatsoever was needed for the burial of a body. The administration did not even record the infant mortality rate, an important health index. Using figures supplied by the Registrar General, Sir Wilfred estimated it to be 153.5 per 1000. He wrote in his report:

> The Prevalence of typhoid fever, paratyphoid, dysentery, gastroenteritis and diarrhoea, especially infant diarrhoea points to faulty sanitation and, in addition, a lack of efficient care of infants and children, especially under home conditions.

The Beveridge Report led the Board of Health to make numerous changes in the health administration of the colony and in 1930, the Bahamas General Hospital (the new name given to the New Providence Asylum in 1908) issued strict new rules that improved the care delivered in the institution.

The outlook for persons who suffered from typhoid fever and tuberculosis improved with the introduction of basic infrastructure such potable water

pumped to public faucets rather than drawn from backyard wells. The impact of these infectious diseases was further reduced when antibiotics came in the late 1940s and early 1950s. Peptic ulcer disease however, remained a common digestive disease in the Bahamas as the standard therapy of rest, antacids and diet frequently failed to control the condition.

Evans W. Cottman, an American schoolteacher who obtained a license as an 'unqualified medical practitioner' in Crooked Island and Abaco in the 1940s observed that digestive upset was extremely common in his practice. He learned to ask his patients, "You does plague wid gyahss?"

Cottman subsequently wrote the classic memoir *Out-Island Doctor* about his experience and some of his remarkable observations about the Bahamian diet are still relevant today. He wrote:

> By far the most common plague was indigestion. In one form or another it plagued at least fifty percent of my patients. The reason is easy to understand. The average Bahamian working in the fields rises early, drinks a little tea, goes to his or her plot, works a little while, eats some dry bread for breakfast and again for lunch. In the evening the stomach is overloaded with a heavy meal of grits, cooked almost rock hard, along with some dried fish or perhaps conch made into a greasy stew. No fresh vegetables and few fruits. After years of such abuse the stomach naturally rebels. *Out-Island Doctor, 1963.*

A decade after the publication of Out-Island Doctor, in the year of Bahamian Independence, the Chief Medical Officer reported that the Infant Mortality rate was thirty-two per thousand live births: many infant deaths were caused by gastroenteritis, which in 1973, killed more people than did motor vehicle accidents. That year there were also four cases of typhoid fever and sexually

transmitted diseases remained a major problem. These awful statistics caused the Government to refocus its attention on the importance of health education, sanitation and maternal and child health. This led to the construction of a new Out-Patients Wing at the Princess Margaret Hospital (PMH), which opened in 1976, and expansion of a network of primary healthcare centres in the community.

These improvements led to a steady fall in deaths from infectious digestive diseases but progress was slow. In 1986, the author treated a patient at the PMH who had an amoebic liver abscess that had ruptured through the abdominal wall. This unusual case, which was published in the West Indian Medical Journal, led the authors to review local statistics on amoebic dysentery and we discovered that at the time over one thousand cases of amoebic dysentery were recorded annually in the Bahamas. We discovered that liver abscesses caused by the amoeba organism were far from rare and that Dr. Cecil Bethel, a pioneer Bahamian physician, had earlier gained considerable expertise in the aspiration and drainage of these collections of pus in the liver that he located purely by clinical skill: a daunting prospect for the modern physician to consider without the aid of a ultrasound or CT scans.

In addition to morbidity from infectious diseases of the digestive tract, in the 1960s, persons suffering from non-infectious digestive diseases such as peptic ulcer frequently occupied hospital beds for long periods. Dr. Earl Farrington, the first Bahamian chief of surgery who returned home in 1964, had regular opportunities to refine his skill in performing the standard operation for ulcer disease, the Billroth II. Christian A. Billroth, a German-

Austrian master surgeon, first described the operation in 1881 and the procedure was little changed since then; however, it was a major undertaking and some patients suffered unpleasant sequelae.

In 1977, the drug cimetidine (Tagamet) first became available in the Bahamas and this heralded a decline in the need for ulcer surgery. As similar but more potent anti-ulcer drugs became available during the 1980s the need for surgery further declined.

In 1987, Dr. Nembhard, the first gastroenterologist in the Bahamas, presented astounding information at a meeting of the department of medicine at the PMH that the author attended. He described to a skeptical audience the discovery of a new bacteria called Campylobacter pyloridis, which was believed to play a key role in the causation of peptic ulcer disease. The bacterium was later renamed helicobacter pylori and its discovery by two previously unknown Australian doctors revolutionized the treatment of peptic ulcer disease everywhere, including the Bahamas. The doctors were awarded the Nobel Prize for Medicine in 2005; they were presented to the Nobel Assembly in Stockholm in a stirring tribute that concluded:

> Barry Marshall and Robin Warren; Against prevailing dogmas, you discovered that one of the most common and important diseases of mankind, peptic ulcer disease, is caused by a bacterial infection of the stomach. Your discovery has meant that this frequently chronic and disabling condition can now be permanently cured by antibiotics to the benefit of millions of patients. Your pioneering work has also stimulated research all around the world to better understand the link between chronic infections and diseases such as cancer. On

behalf of the Nobel Assembly at Karolinska Institutet, I wish to convey to you our warmest congratulations, and I now ask you to step forward to receive the Nobel Prize from the hands of His Majesty the King. *Professor Staffan Normark, Stockholm Concert Hall, 2005.*

The era of endoscopy and the 21st Century

Endoscopic examination of the digestive tract greatly aids diagnosis of digestive diseases. For many years doctors here were able to examine the lower part of the colon using a rigid tubular lighted instrument known as a sigmoidoscope that was passed through the anus into the rectum.

Endoscopic examination of the upper digestive tract began in 1868 when a professional sword swallower gave a performance in Freiburg, Germany, that fascinated a local medical practitioner. He convinced the performer visit his clinic where he repeated the performance for his colleagues. This led to the construction of a hollow tube 13 mm in diameter and 47 cm long, which the famous Dr. Adolph Kussmaul used to examine the esophagus and upper part of the stomach of the sword swallower. Dr. Kussmaul was so pleased with his results that he took his esophagoscope and 'patient' on a tour of various clinics to demonstrate the procedure. Gradually, technical improvements were made and despite the steady occurrence of serious and sometimes fatal injuries to patients, the procedure came to be widely utilized. However, the procedure did not reach the Bahamas until 1965.

Dr. Alasdair Graham, a Scottish anaesthetist who in 1965 first arrived in the Bahamas aboard the ill-fated cruise ship, Yarmouth Castle, introduced rigid

esophagoscopy. He used the same technique of passing an illuminated metal tube as was demonstrated by Kussmaul almost a century earlier, except that the procedure was performed under general anaesthesia.

Dr. Winston Campbell, the first Bahamian ENT specialist, expanded the use of this procedure when he returned home in 1980. Drs. Robert Ramsingh, Walter Gibson and Charles Johnson, all trained ENT specialists who followed, also perform this procedure, conducted using essentially the same technique as Dr. Graham employed in 1965. However, the role of rigid endoscopy greatly diminished in the 1990s when flexible endoscopy became generally available in the Bahamas.

Fiberoptic endoscopy of the digestive tract became commercially available in the 1970s but the first flexible GI endoscope in the Bahamas, a Fujinon fiberoptic gastroscope, was acquired by the PMH. This relatively large instrument was not waterproof and could not be submerged in disinfectant, thus it was difficult to clean. The scope was little used and was replaced in 1986 by the much superior Olympus GIF XQ20 gastroscope, donated at the behest of Dr. Earl Farrington by a charitable women's organization, following the successful *Woman '85* conference. Unfortunately, this too saw limited service before it needed repair and it remained out of service for almost two years, until the author returned home from specialty training.

In parallel with the beginnings of flexible fiberoptic endoscopy at the public hospital, the procedure became available in private practice with the arrival of Dr. LA Nembhard.

Dr. Leslie A. Nembhard

Dr. Leslie Anthony Nembhard, the first gastroenterologist in the Bahamas, was born in Greater Inagua in 1942 to Pastor Nembhard, a Seventh Day Adventist missionary from Costa Rica who married Hazel Turnquest of Stevens, Long Island. He left the Bahamas at age three to live primarily in Jamaica, but also in Trinidad and Barbados. He attended medical school at the Autonomous University of Guadalajara in Mexico and interned at Lakeshore General Hospital in Quebec. He subsequently completed a residency in Internal Medicine and Pulmonary disease at Wayne State University in Michigan and returned to Jamaica as the medical director to the Kaiser Bauxite Company. In 1979 he completed a fellowship in gastroenterology at the University of Southern California and upon his relocation to Miami, became the first black gastroenterologist in the State of Florida.

Dr. LA Nembhard, 1942 – 2005

In 1985, at the age of forty-three, Dr. Nembhard came home and introduced the specialty of gastroenterology to Nassau. He began his practice at

Doctors Hospital and there he performed fiberoptic upper GI endoscopy and colonoscopy. His practice flourished as for the first time, ambulatory flexible endoscopy of the digestive tract became available in the Bahamas. The PMH, lacking this equipment and expertise, regularly transported patients to his office for procedures and for some patients who were too ill to be transported, he brought his equipment with him into the hospital to perform endoscopy.

In 1987, Dr. Nembhard moved his office to Oxford Medical Centre on fourth terrace Centreville, off Collins Avenue. As his assistant he hired Ms. Carla Bain, who had recently graduated from high school, and together they performed the first out of hospital, upper GI endoscopy and colonoscopy in the Bahamas. Ms. Bain, now a qualified Emergency Medical Technician, still works part-time as an endoscopy assistant with the author.

Mrs. Ann Gay joined Dr. Nembhard's practice in the early 1990s and she remained his primary assistant until the onset of kidney failure forced him to retire from full-time practice in 2003.

The early 1990s: A hospital gastroenterology service

The author first met Dr. Nembhard in 1987, during one of his visits to the Private Medical Ward at the PMH to scope a patient of Dr. Ronald Knowles who had suffered bleeding from the stomach. I observed first-hand the utility of flexible endoscopy and the need for this service to be stationed in the hospital was readily apparent. I was inspired to enter the field and discussed my idea of specializing in gastroenterology with Dr. Phillip

Thompson, my former chief in surgery. He enthusiastically encouraged me to pursue training in that area and shortly thereafter I left for the UK on a Commonwealth Scholarship. I trained under professor Alan Read and Dr. Ken Heaton at the Bristol Royal Infirmary and returned home at the end of 1990.

In 1991, Dr. John Lunn, then head of the department of medicine at the PMH, facilitated the provision of space for me to begin a hospital outpatient gastroenterology clinic. The greatest immediate was a lack of working equipment. Videoendoscopy was introduced at the hospital with equipment that was purchased with a loan from my father. A few years later the hospital purchased its own equipment.

The care of an important GI emergency was immediately improved with the assistance of Dr. Nicholas Hepburn, then head of the department of surgery. Together we introduced a standard protocol for the care of hospital patients with gastrointestinal bleeding. Nurses, led by the example of Mrs. Willamae Smith and Paula Whitfield, were encouraged to take an interest in acquiring endoscopy nursing skills and many took advantage of in-service training sessions provided. Nurse Evelyn Gibson took a particular interest in the field and excelled to become the first hospital endoscopy assistant.

In 1993, the first training course for nurses and assistants in gastrointestinal endoscopy was held at the School of Nursing. It was organized with the assistance of nurses Cynthia Khan, Harriet Cartwright and Evelyn Gibson, who set up the room and demonstrated the care of the endoscopy patients and equipment. The entire course was videotaped by Mr. Michael Bullard.

Also 1993, Dr. David Jagelman, then chief of colorectal surgery at the Cleveland Clinic in Florida, visited Nassau. We collaborated on the care Bahamian patients with juvenile polyposis but this promising association was cut short as the brilliant Dr. Jagelman died of cancer soon after we began.

Drs. Jeffrey Diamond and Wayne Scheonfeld of Memorial Hospital of Hollywood, Florida welcomed the author on a visit to their endoscopy unit. This affiliation meeting that came about at the instance of Princess Margaret Hospital administrator Michaela Storr along with Dr. Robin Roberts and others, later led to visits by small groups of Bahamian nurses for valuable exposure at a large endoscopy unit.

Throughout the 1990s new gastroenterology procedures were introduced: ambulatory oesophageal pH monitoring and Botox injection of the lower oesophageal sphincter in 1994, ERCP at Doctors Hospital in 1995 and in 1999, C-14 urea breath testing for H. pylori infection of the stomach.

In 1994, Dr. Duane E. Sands, a trained cardio-thoracic surgeon with experience in GI endoscopy returned home to practice. He shouldered a measure of the demand for endoscopy at both the Princess Margaret and Doctors Hospital. Later, Drs. Thodore Ferguson and Delton Farquharson, both chest surgeons with a demonstrated interest in GI endoscopy, returned to the Bahamas to practice thoracic surgery and GI endoscopy.

The Centre for Digestive Health

In 1997, a milestone in gastroenterology was achieved when The Centre for Digestive Health in Grosvenor Medical Centre opened, becoming the first ambulatory GI endoscopy centre in the English-speaking Caribbean.

Mrs. Margaret Coffey, a certified gastroenterology nurse and manager of a large endoscopy unit in Georgia, visited the Centre and conducted a course for gastroenterology nurses and assistants at the public hospital.

Support from overseas

Professor Orrin Barrow of Jamaica and Dr. Charles Edwards of Barbados have been of tremendous support as leaders of the Association of West Indian Gastroenterologists (AWIG); a family of colleagues throughout the Caribbean. Professor Jamie Barkin, chief of gastroenterology at Mt. Sinai Medical Centre in Miami Beach, has been an invaluable resource, as was Dr. Joe DiMase of Rhode Island.

Bibliography

Craton, M. & Saunders, G. (1992). “Yocahú and Atabeyra: Life, death, and the Lucayan mentalité” pp. 38-47 in *Islanders in the stream: A history of the Bahamian people, Vol. I.* Athens, Ga.: University of Georgia Press.

Settipane, G. A. (Ed.). (1995). *Columbus and the new world: Medical implications*. Providence, R.I.: Oceanside.

Townsend, P.S. (1968). *The diary of a physician from the United States visiting the island of New Providence, 1823–4*. Nassau: Bahamas Historical Society.

Craton, M. & Saunders, G. (1992). “The lifeways of slaves” pp. 297-334 in *Islanders in the stream: A history of the Bahamian people, Vol. I.* Athens, Ga.: University of Georgia Press.

Penrose, C. A. (1905). “Sanitary conditions of the Bahama Islands” pp. 387-416 in Shattuck, G. B. (Ed.). *The Bahama Islands*. New York: Macmillan.

Beveridge, W. W. O. (1927). *Report of the public health and on medical conditions in New Providence, Bahama Islands*. London: Waterlow & Sons Ltd.

Cottman, E. W. & Blassingame, W. (1963). *Out-island doctor*. (3rd ed.). Nassau: Media edition 1998.

Munnings, Harold A. (2005). Princess Margaret Hospital: The story of a Bahamian Institution. Nassau: Media.

Amoebiasis Presenting as an Abdominal Wall Abscess (Amoeboma Cutis)
W.I. Med. J. (1987) 36: 108-9

Bethel, C. (2004, November 4). *Interview*. Senior consultant physician and former medical chief of staff, Princess Margaret Hospital, Nassau.

To the hilt: Sword swallowing. *Kaussmaul’s rigid endoscope.* Retrieved October 4, 2006 from http://www.swordswallow.com/halloffame.php

The Nobel Foundation. *Presentation Speech; The Nobel Prize for Physiology or Medicine, 2005.* Retrieved September 28, 2006 from http://nobelprize.org/nobel_prizes/medicine/laureates/2005/presentation-speech.html

Campbell, W. (2004). Interview. Senior consultant otorhinolaryngologist, Princess Margaret Hospital, Nassau.

“Doctor is responsible for acquiring state-of-the-art equipment at PMH. (1991, May 27). The Nassau Guardian.