



Do we surgeons perform surgery only?

Biz cerrahlar sadece ameliyat mı yaparız?

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Orthopedic surgeons all over the world are performing excellent surgeries with the advances in arthroscopy, arthroplasty, traumatology etc. with the development of better implants using basic science routinely. However, overuse and abuse of surgeries in almost every country are getting more common day by day. That means many surgeries are being performed without indication or with the wrong indication.^[1]

We must all keep in mind that we are physicians first. Many times, surgery is either not urgent or unnecessary and conservative treatment is good enough.

We must all be good observers. Particularly in epidemic diseases or with a case report, we can do something to find out the etiopathogenesis or a solution for treatment.

The extraordinary story of Denis Parsons Burkitt is one less well-known; he was an accomplished Irish surgeon, elected a Fellow of the Royal College of Surgeons (Edinburgh) at the age of 27, and bound for a life of luxury and prestige.^[2] However, he was not dazzled by the prospects of privilege, and sought a more meaningful calling by pursuing missionary work in Africa instead.^[3] Without formal research training, Burkitt conducted one of the most formidable epidemiologic studies in the history of cancer research by surveying the entire continent of Africa to identify a new form of non-Hodgkin lymphoma.^[4]

The New York Times published the following report^[5] about him on April, 1993: "Dr. Denis P. Burkitt, a missionary surgeon in Africa, who turned to research in his late 40s and came up with important

findings on cancer and nutrition, died on March 23 in England. He was 82.

Dr. Burkitt's maps of the incidence of a tumor that occurred in children across Africa accelerated research into whether viruses cause cancer. His championing of a thesis that high fiber protected against colon cancer and many other diseases led millions of people to change their diet.

His major medical contributions came from a passion for plotting diseases on maps and a relish for detective work carried out as a distraction from the operating room.

His first important finding came in the late 1950s and early 1960s after he and two colleagues visited hospitals on a 10,000-mile trip to study the



Figure 1. Dr. Denis after receiving his B.A., Front Square, Trinity College. Dublin, July 1933.

distribution pattern of the most common childhood cancer in East Africa. It was a rapidly fatal cancer of the immune system, which is now known as *Burkitt's lymphoma*. It occurs in five million square miles of Africa between the latitudes 10 degrees north and 10 degrees south.

Through collaboration with researchers in New York City and elsewhere, Dr. Burkitt went on to develop a combination of drugs that usually melted the cancer and sometimes cured it.

Then in the 1970s and 1980s, Dr. Burkitt plotted maps that pointed to vast differences in the kinds of diseases affecting poor Africans and the affluent in the Western world. In trying to explain the differences, Dr. Burkitt turned to observations made earlier by others. In lectures in New York City and elsewhere, Dr. Burkitt criticized the modern habit of eating carbohydrate sugars and starches in refined form, stripped of their bulky, chewy coverings. And he pointed to dangers of eating white flour.

Dr. Burkitt's investigations contributed in turn to additional research developments in cancer, chemotherapy, immunology, and infectious diseases. It was after listening to a lecture by Dr. Burkitt in London that Dr. Tony Epstein went on to discover what is now known as the Epstein-Barr virus. It has been linked to Burkitt's lymphoma, infectious mononucleosis, and cancer of the nose and mouth.

Denis Parsons Burkitt was born on Feb. 28, 1911, in Ireland, where his father was a surveyor and naturalist. The senior Burkitt is credited with pioneering the ringing of birds to map out their territories and movements.

Denis Burkitt considered becoming an engineer when he enrolled at Trinity College in Dublin. But he settled on medicine after conquering chemistry, a subject for which he had little aptitude.

In 1938, after training as a surgeon, Dr. Burkitt spent five months on a cargo ship bound for Manchuria, reading and planning his future as a surgeon and missionary.

From 1946 to 1964, Dr. Burkitt often worked in remote areas in small hospitals that had no X-ray facilities, and he taught surgery at Makerere University Medical School in Kampala. He ministered to his patients' spiritual as well as physical needs.

On a home leave in Britain, **Dr. Burkitt took courses to learn ORTHOPEDIC SURGERY and REHABILITATION MEDICINE** and devised ways to make **cheap artificial limbs. When he returned**

to Uganda, he set up a small workshop where limbs could be made from plastic and spare iron.

In 1957, a colleague, Dr. Hugh Trowell, asked Dr. Burkitt to examine the swollen jaws of a five-year-old boy. The swelling was due to a tumor that was beyond surgical treatment. Soon Dr. Burkitt recognized similar cases and found that the jaw tumors appeared in many other areas of the body.

A colleague told him the cancer was unknown in South Africa. Curious, Dr. Burkitt set out to map the peculiar distribution of the lymphoma, and *he relinquished his scalpel for a new career, full-time medical research.*

Dr. Burkitt reported the tumor in 1958 in *The British Journal of Surgery*. It drew little notice. But Dr. Burkitt persisted, and gathered additional data showing that the tumor did occur elsewhere in the world but far less often than in East Africa. Further analysis showed that Burkitt's lymphoma followed the distribution of malaria and yellow fever, suggesting spread by an insect.

In the 1970's, Dr. Burkitt again collaborated with Dr. Trowell, a nutritional expert, and expounded *the dietary fiber hypothesis* in scientific journals and in several books.

In its obituary, *The Lancet*, an international medical journal published in London, said: "Some of the original fiber hypothesis has had to be dropped, more has been toned down or modified but, thanks largely to Burkitt, the science of nutrition was galvanized into new life and people's eating habits all over the Western world changed drastically."

Do you still think that we, orthopedic surgeons, can perform surgery only?

REFERENCES

1. Atik OŞ. Do not treat the radiograph, treat the patient! Eklem Hastalik Cerrahisi 2015;26:125.
2. Moghanaki D. Denis Parsons Burkitt, FRSM, FRCS (Edinburgh): a passion for learning. J Pediatr Hematol Oncol 2008;30:754-7.
3. Burkitt D. A sarcoma involving the jaws in African children. Br J Surg 1958;46:218-23.
4. Burkitt D, O'conor GT. Malignant lymphoma in African children. I. A clinical syndrome. Cancer 1961;14:258-69.
5. Altman LK. Dr. Denis Burkitt Is dead at 82; Thesis changed diets of millions. The New York Times April 16, 1993. Available from: <http://www.nytimes.com/1993/04/16/obituaries/dr-denis-burkitt-is-dead-at-82-thesis-changed-diets-of-millions.html>