

MEDICINE

Art Reveals Mankind's Ailments

By Making Diagnoses of Paintings and Statuary, a Physician Unravels the Story of Man's Ills Through the Centuries

By JANE STAFFORD

A BALTIMORE physician recently held a strange sort of clinic. The patients were all figures painted on canvas or sculptured in bronze many centuries ago. They could not tell him how they felt or where they had a pain or any other symptoms. Yet he was able to diagnose their ailments.

You may have looked at the same pictures and statues many times and never noticed that they were commentaries on the diseases and deformities humanity suffered from during the artist's time. It takes a physician to walk through an art gallery and to see the range of ailments that have afflicted mankind at all stages of history.

It was a study of history that started the Baltimore physician, Dr. John Ruhräh, on the investigations which led finally to his holding this strange sort of clinic at a recent meeting of his fellow physicians. Dr. Ruhräh devotes himself especially to treating diseases of children, and he wanted to know all about how such conditions had been treated from earliest times. In fact, he was interested not only in the methods of early pediatricians but in their biographies as well. So, by way of recreation from his practice he delved into old books and records, and, since pictures are good records, he studied them, too.

Prince With Paralysis

In Copenhagen, at the Carlsberg Glyptothek, which is a museum of antiquities, Dr. Ruhräh found a 30-century-old Egyptian stone on which are carved the figures of a young prince and his family. It is thought that the prince suffered from infantile paralysis in his youth, for his right leg shows the deformity typical of this disease. The shortened, wasted limb is, unfortunately, such a familiar sight because of the frequent outbreaks of the disease in our own times, that you would have no difficulty in recognizing it from the picture. The young man of the stone picture was Ruma, prince of the eighteenth dynasty of Egyptian rulers whose reigns stretched from 1580 to

1350 B. C. Ruma had charge of the temple of the goddess Astarte, in Memphis, from which the carved stone doubtless came. With him are shown his wife, Imoa, and their child. Apparently they are bearing offerings to the goddess whose temple was Ruma's special care.

Prince Ruma was the first patient Dr. Ruhräh showed at his unique clinic. This Egyptian ruler is thought to have had the earliest case of infantile paralysis, or poliomyelitis as physicians call it, on record. But Dr. Ruhräh questioned whether infantile paralysis really was the disease from which he suffered. He pointed out that the paralysis and deformity of his leg might have been due to some other disease affecting the nervous system, or to a hip joint disease contracted when Ruma was a baby.

Whatever caused the deformity, the stone carving is an indication of the realism of these ancient Egyptian artists, who did not hesitate to portray even princes with well-marked signs of human frailty and disease.

Biblical Epileptic

The second patient whom Dr. Ruhräh called at his clinic was a lad he found in a corner of Raphael's famous painting of the Transfiguration. You are doubtless familiar with the picture, but did your eyes ever stray from the central figure to the group in the lower right-hand corner? In the midst of this excited group a man and woman are supporting a lad who is apparently seized in some sort of convulsion. Dr. Ruhräh called attention particularly to his eyes and hands. The eyes are wildly rolled upward and outward so that chiefly the whites show. The boy's mouth hangs open. His hands are flung out in a meaningless gesture but with the fingers held in cramp-like positions. To the physician, these hands and eyes show that the lad suffered from some disease of the nervous system. According to the symptoms given by the child's father in the Biblical account of the scene, the lad was suffering from epilepsy. He frothed at the mouth, he was "lunatic" and he had fits during which he fell into the

fire or into the water. Epilepsy even today is not very well understood, but physicians are agreed that it is a disease of the nervous system. The lad in Raphael's painting judging from his appearance might have had epilepsy, or he might have had some other ailment affecting his brain and nervous system.

Paralytic From Birth

In another of Raphael's paintings, the one showing St. Peter and St. John on the steps of the Temple, is a cripple with twisted legs and feet. Considering him from the purely medical viewpoint, he suffered from spastic paralysis. According to the Bible story he suffered from some congenital disease; that is, he was born with the condition which prevented his legs from developing normally so that he could walk. He is shown in the painting at the moment when Saint Peter took him by the hand and healed him. Raphael used his imagination in this picture, Dr. Ruhräh thinks, because if the man had suffered from spastic paralysis from birth he would not have been able to exercise his legs enough to get so much muscular development as he has in this painting.

For the next demonstration at his unique clinic, Dr. Ruhräh showed an entire group of patients on a canvas. In a Berlin gallery hangs a painting by the Italian artist, Sandro Botticelli, of the Madonna and Child with the two Saint Johns. Both Mother and Child, Dr. Ruhräh pointed out, suffered from arthritis, or rheumatism as it is sometimes called popularly.

If you look closely at this painting, you will see that the Mother, the Child and even possibly the Saint at the right, have the nobby finger joints you have seen on the hands of your friends or relatives who suffer from arthritis. This characteristic sign is especially noticeable in the Child's right forefinger. In addition, Dr. Ruhräh called attention to the shape of the Child's head and His bowed legs, which indicate that He also suffered from rickets.

Signs of disease and deformity appeared in the paintings and sculpture of ancient times for various reasons. Sometimes it may have been merely because the artist's models suffered from these conditions. Or they may have been very prevalent during the artist's time, so



A GOITER BROUGHT BEAUTY

—to *Monna Pomona the lovely Italian lady painted by Rosetti. Rosetti painted other goitrous girls, for they were considered beautiful.*

that he either did not notice them as being unusual, or else he painted them intentionally because that was the way most people looked to him.

However, certain conditions which we now see merely as symptoms of disease were in former times considered marks of great beauty. Such, for instance, is the enlarged thyroid gland, or goiter. Do you remember the lovely maidens painted by Rosetti and did you ever notice that their swan-like necks were goitrous? The beautiful *Monna Pomona* is a particularly good example of this type of so-called beauty and also of the simple goiter seen commonly in Switzerland and in some parts of the United States where the drinking water and food are lacking in iodine.

Dwarf God

For his next patient, Dr. Ruhräh called on a statuette of one *Khnoumtpou*, the ancient Egyptian god of perfumes. This tiny creature was an achondroplastic dwarf, Dr. Ruhräh said.

Dwarfs have been popular with artists and with royalty for many centuries, he explained. The Egyptians made court playthings and favorites of captives from dwarf or pygmy tribes of the interior of Africa. They even represented some of their gods as dwarfs.

This tiny fellow shows signs of a condition known to physicians by the long name of achondroplasia. He has a nor-

mal sized head and trunk, but his arms and legs are very short. The fingers of this sculptured figure are not quite so characteristic. You can see they are of almost equal length, but they should diverge from the middle joints to give the hand a trident shape.

Dwarfs of this type usually reach a height of about 3 or 4 feet. They are well-nourished and strong and of average intelligence. Their condition is due to the fact that the long bones of their bodies united with the cartilage of the joints too soon and consequently the long bones could not grow normally. This is what gives these dwarfs their short, stumpy arms and legs.

Another type of dwarf often seen in paintings is the cretin. These creatures, familiar to you in the paintings of the Spanish court by Velasquez, failed to grow normally because from birth their thyroid glands did not secrete enough of the hormone, thyroxin.

From a painting by Petrus Brandel, Dr. Ruhräh called his next patient, the blind Tobias of the Bible. You remember that Tobias' son was led by an angel to a lake where he caught a fine fish. Then, still under the angel's guidance and according to her directions, he removed the gallbladder of the fish and laid it on his father's eyes. This restored Tobias' sight. In Brandel's picture you see the angel guiding the son's hand as he applies the fish gallbladder to his father's eyes.

King "Tut's" In-Laws

In this connection, Dr. Ruhräh told a story of modern medical practice which almost exactly reversed the old Biblical tale of Tobias and his son. A young Baltimore physician who specializes in treating diseases of the eye was working in a clinic in Boston when a man was brought in suffering from ulcers of the cornea of the eye. The man was a fish dealer. He said that while cleaning a fish he accidentally slit the gallbladder and some of the gall squirted up into his eye, causing the trouble from which he sought relief at the clinic. The young physician was very much interested in what he believed a most unusual case. When he returned home, he told his father, also a physician and a distinguished scholar as well, about this rare case, which, he said, was probably the only one of its kind on record, as he had been able to find no reference in medical literature to blindness or eye injury connected with the gallbladder of a fish.

Whereupon the father replied:

"You may have studied the medical literature, my son, but you do not know your Bible very well," and proceeded to tell him the old tale of Tobias.

The last two patients brought to Dr. Ruhräh's clinic were two very distinguished persons—the mother-in-law and father-in-law of the Egyptian King, Tutankhamon. King Akhnaton, the father-in-law, was a reformer and a very advanced man for his time. He commanded his people to adopt the exclusive worship of one god, a world-god, centuries before monotheism appeared in any other part of the world. Though he did not know it, he thus became the first to further the cause of heliotherapy or, in everyday language, sun healing, because the god he selected for his world-god was the sun god, Re. In order to worship this god, of course, people were bound to be exposed to the sun's health-giving rays.

Dr. Ruhräh showed a picture, carved on stone, of King Akhnaton and his wife, Queen Nefertiti, who was herself a famous beauty, worshipping the sun disk and incidentally getting a good dose of ultraviolet light from the rays of the sun which you can see streaming down on them and their children.

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In these days of rapid progress in medical science, it is interesting to reflect that Disocorides who wrote his "Materia Medica" in the first century A. D. remained the recognized authority on drugs for 1,600 years.

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by
Dr. W. Reid Blair

Director of the New York Zoological Park

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