

ANTHROPOLOGY

Neanderthal No Relation

► NEANDERTHAL—the ancient man with the wavy hair, sloping forehead and stooped posture—is not related to modern man.

Neanderthal was a “side issue” in the line of evolution. He followed his own path of development and became extinct at the time of the Pleistocene glaciations, about 100,000 years ago.

Studies of the brain’s evolution led Dr. Gerhardt von Bonin to this conclusion. He sides with the scientists who believe modern man replaced Neanderthal rather than mixing with him.

During the evolutionary period from Australopithecus to modern man, the brain tripled in size and filled out in shape, Dr. von Bonin found. Many separate measurements and observations show these changes. Dr. von Bonin explained that in the course of evolution upper areas of the brain, the cerebrum and parietal zone, grew higher and wider in comparison to the rest of brain.

But Neanderthal’s measurements, Dr. von Bonin said, do not follow the trend. Although his brain is approximately the same size as modern man’s, the shape is lower and less filled out. Later specimens show these characteristics were exaggerated as Neanderthal developed, and indicate that he drifted from the mainstream of evolution and gradually died out, Dr. von Bonin said in *The Evolution of Man* (University of Chicago Press, \$5.00).

He cautioned that measurements of the

inside of the brain case give “little more than vague clues about the brain itself.” The size of the brain is a poor indicator of mental ability, he said, because it does not show the inner structure—the internal formations and connections—that determines what the brain can do.

The evolution of mental processes, he said, cannot be charted until more knowledge of the internal workings of the brain has been obtained. Dr. von Bonin, professor emeritus of the University of Illinois, is a lecturer at the University of California and a consultant in neuroanatomy at Mount Zion Hospital, San Francisco.

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SURGERY

One in 1,000 Babies Has Cleft Palate or Lip

► ONE IN 1,000 BABIES is born with a cleft palate or cleft lip, sometimes called harelip, but not one needs to go without surgical correction.

If a family is unable to pay for an operation, Dr. Richard C. Webster, president of the American Cleft Palate Association, told SCIENCE SERVICE, funds are available in most states through various agencies to make a normal mouth possible.

Operation for cleft palate repair is essential, and although cleft lip is a less serious condition, it too should be corrected at an early age.

Cleft palate is a defect of the roof of the mouth, the cleft being on the mid-line and allowing direct communication between the nose and the mouth. The serious effect on the infant is obvious. Sucking is impossible and milk taken into the mouth tends to escape through the nostrils instead of being swallowed.

The tendency is to perform surgery both for cleft palate and cleft lip earlier than formerly, but surgery alone is not all that is required to make a normal mouth and a normal child.

Speech is one of the great difficulties, as well as psychological problems. The team approach is desirable, Dr. Webster, a plastic surgeon of the Webster Clinic, Brookline, Mass., said. The team should include not only the plastic surgeon but an orthodontist, an oral surgeon, an ear, nose and throat doctor, a dentist, pediatrician, speech therapist, psychologist and psychiatrist.

This ideal situation does not exist in all states, but somewhere in the state or community, specialists are available.

At the meeting of the American Cleft Palate Association in Washington, D. C., emphasis was placed on new devices that test speech and aid in its improvement.

The warm wire flow meter permits measurement of nasal “leakage” or tone. Electricity is run through two thin wires and by blowing air across them, a fast way of measuring the leakage is obtained.

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SURGERY

Warm Blood Transfusions Control Massive Bleeding

► A NEW WAY of saving life from excessive bleeding following an operation is to transfuse warm blood into the patient, Dr. C. Paul Boyan of New York’s Memorial Hospital told the New York Academy of Sciences in New York.

This supplying of blood at body temperature from a blood bank is a better method of treatment than the older procedure of lowering the blood pressure.

Deliberately lowering the blood pressure can reduce hemorrhage at first, he explained, but it is no substitute for careful surgical technique. If proper care is not taken, almost as much blood can be lost in reduced pressure as before the blood pressure was lowered.

Using drugs that relax the blood vessels can be a dangerous procedure, Dr. Boyan warned. Experimental results with animals have been good, but drugs should not be risked with patients having reduced blood volume.

The use of warmed blood avoids harmful narrowing of the blood vessels caused by reduced blood volume or chilled blood, he said.

Among 84 patients at Memorial Hospital who received warmed bank blood, only five have died, Dr. Boyan said. There were 21 deaths among a matched group of 36 patients who received cold bank blood.

Use of cadaver blood was also reported by Dr. Jack Kevorkian of the Pontiac General Hospital, Pontiac, Mich. He said such blood, taken from victims of relatively sudden and unexpected death, had been successfully transfused into pre-operative and ambulatory medical patients and those expected to die.

Blood is drawn from the jugular vein within six hours after death, and stored according to conventional blood bank regulations. A complete autopsy assures that the cadaver blood is safe, Dr. Kevorkian declared.

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MEDICINE

Diet in U.S. Cause of Unhealthy Arteries

► THE UNITED STATES is the most unhealthy country in the world so far as arteries are concerned.

This is the belief of Dr. Paul Dudley White of Boston, who attended former President Eisenhower when he had his heart attack. Comparing arteries of Bostonians with those of Japanese, Irish and Italians, he said the difference in arteries was not racial. Immigrants develop hardening of the arteries after they adopt the American way of eating. This means an overabundance of animal fats.

Overnutrition is a form of malnutrition, he pointed out in the Archives of Environmental Health. The starving peoples of the world have practically no hardening of the arteries.

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