

MEDICINE

Arthritis Clue in Blood

Rheumatoid arthritis may develop from exposure to an antibody-producing material. A blood substance, produced in laboratory animals, resembles the human rheumatoid factor.

➤ RHEUMATOID ARTHRITIS may develop as a result of extended exposure to an antigen, or antibody-producing material.

This possible clue to the mystery surrounding rheumatoid arthritis was reported by Drs. John Abruzzo and Charles L. Christian of the Presbyterian Hospital, New York. They told the American Rheumatism Association meeting in Dallas, Tex., that they had produced in laboratory animals a blood substance resembling the human rheumatoid factor.

The scientists said it is not known whether this factor is a possible cause or by-product of the disease. Rabbits they injected with certain killed bacteria developed a chain reaction in their blood that formed antibody-like substances. These behaved in many ways like the human rheumatoid factor.

Strengthening this suggestion was the report of a new substance by Drs. Ralph Heimer, Josue M. Corcos and Carlo Nosenzo of New York's Hospital for Special Surgery-

Cornell Medical Center. The substance is apparently specific for rheumatoid arthritis but distinctly different from the rheumatoid factor.

This substance, called by the investigators "inhibitor of complement fixation" or ICF, was found in the blood of more than 50 patients suffering from rheumatoid arthritis. It also was found in the blood of some patients with systemic lupus erythematosus and scleroderma, diseases in which the damage to connective tissue is similar to that found in rheumatoid arthritis.

The role of ICF, the scientists said, was one of interfering with the normally prompt interaction of the complement system with antigen-antibody reactions. The complement system has been known to aid in the removal from the human body of foreign and toxic substances previously neutralized by antibody.

Thus the assumption of Drs. Abruzzo and Christian that rheumatoid arthritis may develop as a result of extended exposure

to antigen is supported. ICF, by obstructing the prompt removal of foreign and toxic substances, including virus and bacteria, might be directly involved in the disease process.

• Science News Letter, 78:435 December 31, 1960

PSYCHOLOGY

"Taking It Easy" Is Bad For Business Executives

➤ PHYSICIANS should not always tell worried, nervous business executives to "take it easy," Dr. Gerald Gordon, chief of the psychiatric section of the medical division of E. I. du Pont de Nemours and Co., Wilmington, Del., reported at a meeting of the Central States Society of Industrial Medicine and Surgery in Milwaukee, Wis.

He said that it is not true that "the only things we have to fear" is fear. "If a man wants to worry, let him," Dr. Gordon said. "The idea that a nervous man must be removed from a situation, leave work, calm down and rest is a delusion."

Dr. Gordon said that more and more good men were being relieved or removed from responsible positions because of such erroneous thinking. If the emotions were not released, they would be turned inward and result in "suicide through stress diseases like heart disorders," Dr. Gordon said. He explained that the basic emotions of pain, hunger, fear and rage are designed to help us adapt to the complex, changing times.

"That is not to say that many men do not work too hard and should not take a vacation once in a while," he said. "Many do. But modern man seems to have forgotten that life itself is a conflict. So is society. The full free life, which often includes a good scrap, has become secondary to the desire for constant peace and tranquility."

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PSYCHOLOGY

Scraping Noise Found Worst Known to Man

➤ A TEST at Britain's National Physical Laboratory showed that the most annoying noise known to man is that made by scraping a saucepan with a knife, Dr. B. Wheeler Robinson of the Laboratory's applied physics division reported to the Royal Society of Health in London.

To prove his point, Dr. Robinson played a tape recording of the noise. For comparative purposes he relayed nine other examples of "quieter" noise, including jet aircraft, motorcycles, a road drill, motors and the jungle.

Space travel, Dr. Robinson suggested, is the best hope of freedom from din, and from noise of all types since, without air, there can be no noise, only vibration. Space travel will introduce us to a completely silent world.

Dr. Robinson said he could hold out little hope for early international agreement that would lead to the framing of legislation and regulations against noise.

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Designs Suction Tube

➤ A NEW TRACHEOTOMY tube has been designed by a registered nurse at the University of Florida Health Center, Gainesville, Fla.

Called a "direct suction tracheotomy tube," the device has brought relief in experimental use on tracheotomy patients. It has also enabled surgeons to perform some surgical procedures easier and faster on patients who must breathe by tracheotomy.

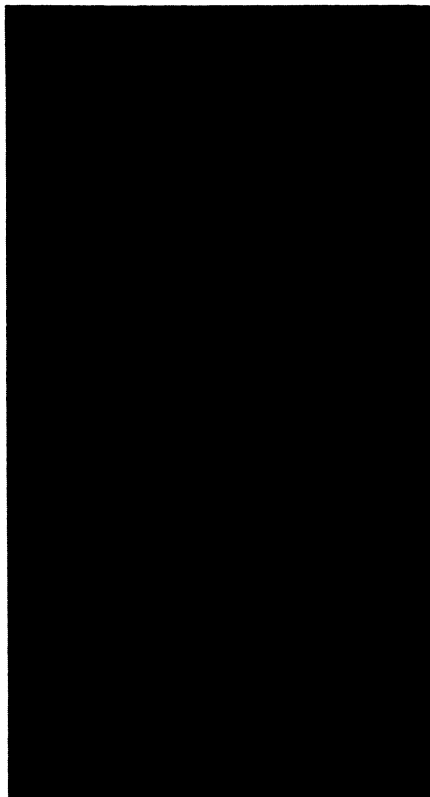
Invented by Miss Josephine Fountain of the University's Teaching Hospital and Clinics, the device consists of two tubes, one inside the other, with a small neck on the outside that has two openings.

With the device, nurses, physicians, or even the patient, are able to easily clear the throat of mucus and other obstructions when breathing via tracheotomy. The new tube also permits easier and safer administration of anesthesia to patients with tracheotomies who require surgery.

Miss Fountain said that with the traditional tracheotomy tube, the application of suction to clear the patient's throat usually restricts breathing because it is necessary to insert a smaller tube through the tracheotomy tube.

The new device has two important advantages over the traditional tube. It may be used for administering oxygen, and the inside tube can be removed for cleaning with little or no discomfort to the patient.

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TUBE HAS BROUGHT RELIEF