

# medical sciences notes

## RhoGAM

### Immune globulin near licensing

The licensing of the vaccine-like blood fraction RhoGAM (SN: 11/25/67, p. 520) is expected soon, and should help women and their babies when the Rh factor is a problem.

The Ortho Pharmaceutical Corp. of Raritan, N.J., has been testing RhoGAM on hundreds of women since 1964. The serum is made from the blood of Rh-negative women who already have antibodies to the positive blood factor in their bodies, and from the blood of Rh-negative men who volunteer to become sensitized by injections of Rh-positive blood.

Now the World Health Organization has created an International Reference Center for use of human immunoglobulin, in the prevention of Rh sensitization. The center is in St. Mary's Hospital Medical School, London, under the direction of Dr. N. Hughes Jones.

There the United Nations health agency will test the available pools of the serum. Dr. Howard Goodman, chief of WHO's immunology unit, urges Rh-negative men, particularly those in families where Rh-negative women might endanger their babies, to volunteer as donors by receiving injections of Rh-positive blood, then producing the desired antibodies.

## LUNG TRANSPLANTS

### Preservation time lengthened

Preservation of lungs for transplantation in test animals has been extended to 24 hours with techniques used at Brooklyn's Downstate Medical Center, State University of New York.

The usual time of preservation has been only two hours. Since it takes several hours to prepare a recipient for the transplant, the time extension could be life-saving.

One key fact that emerged from the research, Dr. Antonio A. Garzon, head of the surgical team, explains, is that heparin, a substance that prevents blood clotting, is needed in the solutions used in perfusing the lungs after their removal. Also, oxygen was used in twice the amount found in the atmosphere. Storage was at four degrees C.

Dr. Garzon says cadaver donors will most likely have to be used when human transplants are attempted.

## TOOTH LOSS

### Nutritional lack affects bone

Inflamed gums have been blamed for weakening the bone structure around the roots of teeth and causing them to loosen. But a Cornell University scientist, Dr. Per Henrikson, announces a reversed theory, saying that the bone is affected first, and that diet is basically at fault.

Laboratory dogs at the New York State Veterinary College were fed low levels of calcium and too much phosphorus. Dr. Henrikson reports that the animals' teeth became detached after 12 months.

Comparing human dietary habits with those of the experimental animals, Dr. Henrikson and Dr. Lennart

Krook, find that the average diet in the Western World is as bad, if not worse, than the dogs.

"In other parts of the world," Dr. Henrikson says, "periodontal disease is still more serious. In India, for example, it is a major disease of teenagers, since that country has less calcium available for its population than any other country."

He says the best foods to reduce the occurrence of periodontal disease are milk and milk products because they are high in calcium. Foods poor in calcium and high in phosphorus are meat, meat products and bread.

The findings are published in the April 16 issue of the Journal, ACTA ODONTOLOGICA SCANDINAVICA.

## RHEUMATOID ARTHRITIS

### Clue seen in pig research

A clue that could lead to understanding of the causes of rheumatoid arthritis is seen in a report from Stockholm on pig research.

Two Swedish doctors say that when they fed a high protein diet to pigs, the animals reacted with skin changes and inflamed joints not unlike those found in the early stages of human arthritis.

High protein diets are recommended for persons with rheumatoid arthritis. But the Swedish researchers find that both arthritis patients and the pigs tested under high-protein diets show an increase in an intestinal bacterium of the genus *Clostridium*. The animals, and 65 percent of the human arthritics, had circulating antibodies against the intestinal bacteria.

In the pigs the disease symptoms disappeared as soon as the immunological response stopped, but in the people, arthritis persisted although antigens continued to be formed.

Prof. Borje Olhagen, head of the Clinic for Rheumatism at the Karolinska Hospital, and Prof. Ingmar Mansson, Royal Veterinary College of Sweden, both in Stockholm, say that although they have not yet been able to establish a definite connection between the symptoms in pigs and humans, they believe similarities do exist. They hope that further research will explain the connection.

## DRUG MANUFACTURING

### Federal license suggested

Legislation that would require drug manufacturing firms to obtain a Federal license before beginning operations is urged by the outgoing chairman of the Pharmaceutical Manufacturers Association.

Walter A. Munns said at the annual meeting of PMA at Boca Raton, Fla., that under the present law anyone can start a drug manufacturing business and operate for two years before the Food and Drug Administration is legally required to inspect the plant and its operating procedures.

This is a real threat to the public health, Munns declared. He believes the law also should make it mandatory for the FDA to inspect every drug manufacturer at least once every year instead of once every two years as required by the 1962 Kefauver-Harris Act.

27 april 1968/vol. 93/science news/405