

INFECTION

New organ discovered

In the 19th century, the Bursa Fabricius organ, a collection of lymphocytes resembling a small pouch-like sac, was found in birds. Located in the lower part of the intestines, it is the organ which develops circulating antibodies to combat infection.

Although similar collections of lymphocytes have been found in other animals, no function has ever been proved. The question of an organ which develops antibodies in man has been puzzling scientists for years.

Convinced that there should be one, Prof. Karl-Erik Fichtelius of Uppsala University, Uppsala, Sweden, spent two years looking before he found what he believes to be such an organ in human beings.

The organ, small collections of two types of cells, was described at a recent conference on cancer in Stockholm as a scattered series of lymphoepithelial microorgans and not one intact body. These microscopic collections consist of both blood lymphocytes and epithelial cells which make up the various linings of the body. The microorgans were found in the mastoid gland, pancreas, gullet, bronchia, larynx and different parts of the skin.

TUBERCULOSIS

Elderly still vulnerable

Drugs have drastically reduced the morbidity and mortality of tuberculosis. Yet the disease, not limited to the underprivileged or underfed, still occurs sporadically in elderly persons who are neither aware of having the disease or have had any recent contact with it.

Such appearances in the elderly are explained by Dr. William W. Stead of Marquette University in the October 1969 HOSPITAL PRACTICE as due to bacilli which are reactivated under certain conditions. These bacilli, he says, have remained alive but dormant after having infected the patient earlier in life. The disease is often unrecognized, and thus spreads to others.

According to Dr. Stead, at the time the bacillus is initially implanted, it is not noxious to the host. No toxins are emitted and the body reacts only according to its sensitivity. The bacilli, lodged in a well-ventilated portion of the lung, multiply without being interfered with or causing any tissue reactions.

By circulating in the blood, bacilli can cause metastatic implantations in other organs.

DDT

Fears out of balance

Amid the current clamor over DDT, many physicians have lost perspective on the true threat of pesticides, says Dr. Wayland J. Hayes Jr., of Vanderbilt University. The only problem that pesticides present is acute poisoning, he says; this problem has been minimized, while the chronic problem, long-range damage from traces, has been overemphasized.

Poisonings caused by pesticides constitute about a twentieth of all acute accidental poisonings. Fatalities, though not numerous, are caused by absorbing high

doses. Repeated absorption of trace amounts does not produce illness.

Writing in the September HOSPITAL PRACTICE, Dr. Hayes states that the average daily intake of DDT is a little less than 0.03 milligram per person. Studies with volunteers showed that DDT at dosages one hundred to one thousand times as great as those encountered by the general population caused no injury. If these persons showed no illness, the chances of injury to the general population are statistically negligible, he claims.

NEUROLOGY

Teeth signal disorders

The diagnosis of neurologic and intellectual impairment early enough in children has been a problem to physicians. The presence of developmental defects in dental enamel may serve to answer this problem, according to Dr. Herbert J. Cohen of New Rochelle, N.Y. Identifying enamel defects can also earmark the time—whether before, during or after birth—during which such physiologic trauma as diabetes, bleeding or metabolic disturbances occurred.

Dr. Cohen, compared such defects with neurologic impairment in 504 children with varying central nervous systems dysfunctions. He reports that enamel defects proved to be most prevalent in neurologically impaired children seen in clinics, but less common in neurologically normal clinic children or in low income, non-clinic, day care children from this same socioeconomic group. Apparently normal, non-clinic children from middle- to upper-income families showed the least defects in the enamel.

Speaking before a meeting of the American Academy of Pediatrics this week, Dr. Cohen said the difference of enamel defects of the two non-clinic groups was statistically significant.

CANCER

Thyroid cancer in puberty

Although surgery provides an adequate cure rate in children with thyroid cancer, earlier diagnosis could increase this rate even further. In girls, especially, puberty can potentiate thyroid cancer.

In the Oct. 6 issue of MODERN MEDICINE, Drs. Philip E. Exelby and Edgar L. Frazell of Sloan-Kettering Center for Cancer and Allied Diseases, recommend that only one lobe be removed if the lesion is confined to one side only. For more extensive tumors, the ends of the lobe should be removed. They recommend that only rarely should the thyroid be totally removed surgically.

The cancer specialists treated 62 children (40 girls and 22 boys) with thyroid cancer by these methods. Of the total, 47 were alive and well for five years or more after treatment. Eleven were not followed, three died of thyroid cancer and one of complications arising after surgery.

Most of the children had palpable lymph nodes in the side of the neck, and seven had lung metastases present. The average duration of symptoms had been two years, although one patient had noticed the mass for nine years.