

SUMMARIES OF PERSIAN ARTICLES

A CASE OF ACQUIRED HEMOLYTIC ANEMIA

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SUMMARY

The most common form of acquired hemolytic anemia is associated with what appears to be autologous igG hemagglutinins. These antibodies may arise unexpectedly and in the absence of any recognizable underlying disease. However, they are observed not uncommonly as a complication of systemic lupus erythematosus, chronic lymphatic leukemia, lymphosarcoma, ulcerative colitis, etc. The red cells of patients with "warm" acquired hemolytic anemia do not display strong spontaneous agglutination. Regardless of the mechanism responsible for antibody-coated red cells in vivo, the coating protein must be recovered in eluted for appropriate study. Heat (56°C) and either eluate are most commonly used, but acid (Ph 3) eluates from stroma are needed for best recovery of some auto-antibodies when complement components are also present acid eluates may contain some igG molecules that are complexed with C_H.

In practical clinical terms, antiglobulin-positive and autoimmune forms of immunohemolytic anemia are generally considered as a single group. The clinical state is characterized by four major features:

1. Protein is fixed to the erythrocyte surface resulting in a positive direct antiglobulin test.
2. The protein is produced by the patient under evaluation.
3. The protein is apparently an antibody or other component of the immune system.
4. The patient's own erythrocytes coated with such protein (antibody) have a shortened lifespan. "Warm" acquired hemolytic anemia may occur as an acute overwhelming problem and a

comatose patient.

Spherocytes, fragmented cells and erythropagocytosis can be seen, and the plasma can be brown from methemalbumin. The problem to the transfusion service is especially serious because all donor bloods are serologically incompatible. When steroid therapy is successful, the dosage is eventually reduced until a suitable maintenance level is found.

In the absence of significant splenic sequestration, or if splenectomy has failed to improve the patient, immunosuppressive agents can be used. Imuran alone or alternated with another immunosuppressive agent is preferred, along with steroids. In this paper we presented a case of AIHA and reviewed the literature. □

PRELIMINARY STUDIES OF THE EFFECT OF LAVAMISOLE ON THE IMMUNE RESPONSE OF MICE INFECTED WITH LEISHMANIA

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SUMMARY

The susceptibility of various strains of mice to infection by *Leishmania tropica* (major) was recently studied in this laboratory. The infection in A/J, C3H, CBA, AKR/J, AKR/CU and C₅₇B1 mice (the semiresistant strains) remained cutaneous and the animals recovered within 4–6 months. However BALB/c mice developed generalized infection after two months of exposure resulting in death 3–4 months later. When compared to the semiresistant strains, BALB/c mice exhibited a poor delayed hypersensitivity (DH) to leishmania antigen, but a relatively higher humoral response.

In this study, the effect of levamisole on modulation of cell mediated immunity, as well as regulation of disease in A/J and BALB/c mice was investigated and compared:

1. Thirty days after infection, the titer of antibody in levamisole treated A/J or BALB/c mice was similar to the corresponding untreated controls. However, when compared to the controls, the magnitude of DH was decreased in levamisole treated A/J

- mice but partially increased in similarly treated BALB/c mice.
2. The course and severity of infection was influenced by levamisole treatment in A/J mice. Forty-eight days after infection, approximately 45% of the control mice as compared to 5% of the treated animals exhibited cutaneous ulcers. Furthermore, the mortality rate in the control animals was 27%, whereas, none of the treated A/J mice died during this period. Similarly 48 days after infection 100% of the untreated control BALB/c mice and 65% of the levamisole treated animals developed ulcers. The drug, however, had no effect on the death of the infected BALB/c.
 3. Levamisole in doses 2–8 times higher than that used *In vivo* had no effect on the *In vitro* proliferation of the organism.

A SURVEY ON ENVIRONMENTAL HEALTH CONDITION IN DISTRICT OF KANN, TEHRAN, IRAN

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SUMMARY

In the first half of year 1972 a descriptive exploratory survey was done on 75 selected households in District of Kann comprising 589 people. Selection was carried out by simple random sampling without replacement.

The study shows that 33% of men and women are in the age group of 15–24 and family dimension is 5.01. The difference in income level is high. More than 25% of the families earn less than 8500 tomans a year and 17.7% earn more than 25,000 tomans every year. 40% are illiterate and 6.7% are holding degrees above the high school diploma. The average number of people living in a room is 2.2, which is above the standard given by Housing Health Committee of the U.S. Public Health Society (1.5 person in a room) but the average living space for a person is 7.5 m² which is more than twice the recommended standard (3.6m²). In order to wash the dead bodies a place is determined but, since the

people haven't been through the training course, it has not been used so far and the people in this area are using the water from stream and canal to wash the bodies as they would for dishes, vegetables and also taking a bath in summer. This may result in a health hazard. 22.6% of the children under age of 6 have diarrhaea, 14% out of the above mentioned percentage is related to infants. Seven grab samples of drinking water were analysed and the results were compared with the International Standards for drinking water given by the W.H.O. It shows that the minimum M.P.N. and Fecal M.P.N. were 1350 and 900 per 100 ml respectively. Therefore, it could be said that the drinking water (at the time of study) has been polluted by faeces and this implies that necessary measures should be taken before water is to be consumed for domestic purposes. □