Editorial

IMMUNOSUPPRESSION WITH ANTI-LYMPHOCYTE SERUM

The Immuno-suppressive property of anti-lymphocyte serum has been well established (Monaco et al., 1967). It has been used with success in conjunction with prednisone and azathioprine in transplant cases (Starzl et al., 1969; Starzl et al., 1967).

The antilymphocyte serum or antilymphoid globulin is a heterologous serum prepared against various lymphocytes as lymph node lymphocytes, thymocytes and thoracic duct cells. It has been used in a series of renal transplant patients with good results. A better renal function at one year, a reduced steroid dose requirement, a significant fall in the incidence of post-transplantation rejection reactions, a lesser severity of rejection reactions and a shorter hospital stay have been achieved (Behring Institute Mitteilungen, 1972). None of the series having used the antilymphoid globulin reported any harmful effects, as reduced patient or kidney survival, or an increased rate of infection and allergic reactions. No added risk of malignancy was observed.

The use of antilymphoid globulin as a sole immunosuppressive in bone marrow transplants has been well supported (Behring Institute Mitteilungen, 1972; Mathe et al., 1970). Patients suffering from chronic idiopathic or chemically induced marrow aplasia, leukaemia and thalassaemia were transfused with antilymphoid globulin in doses varying from 200 to 400 mgm IgG from four to twelve days prior to grafting. All patients showed blood and marrow restoration with symptomatic improvement. There was an absence of graft versus host reaction.

Patients suffering from extensive burns have been given antilymphoid globulin immunosuppression with skin allograft procedures. Encouraging results have been achieved (Whelchel et al., 1975) making this form of treatment an advancement in burn therapy.

Antilymphoid globulin has been tried in autoimmune diseases as multiple sclerosis, myasthenia gravis, dermatomyositis, lupus erythematosus, periarterites nodosa, rheumatoid arthritis, temporal arteritis and chronic hepatitis (Behring Institute Mitteilungen, 1972). As these diseases have a variable course accompanied with remissions and relapses it has been difficult to evaluate the efficiency of antilymphoid globulin.

An antilymphoid globulin immunosuppressive regime, from six to sixteen days prior to tissue grafting has been experimented on animals (Cerilli and Hattan, 1972; Judd and Trentin, 1973). A donor specific effect, with reduced rejection rates has been achieved.

Although the use of antilymphoid globulin is still in the experimental phase, the favourable response is an encouragement for its application in clinical practice, especially in the fields of tissue transplantation and burns.

References

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