They conclude that mania is an unusual syndrome with many causes—biochemical, psychological, structural, and genetic. Perhaps the newer work on peptide transmitters, vasopressin, and naloxone will bring us nearer to a solution. Meanwhile, the message from Krauthammer and Klerman is that a first attack of mania in a middle-aged person, with no family history of that illness, demands extra-thorough investigation.

ASCORBIC ACID: IMMUNOLOGICAL EFFECTS AND HAZARDS

VITAMIN C, contrary to the suggestion of Pauling,[1] does not seem to decrease the incidence of colds and winter illness.[2-5] There is some agreement that it may bring about a modest reduction in the severity of the symptoms of the common cold, though interpretation of the trials depends critically on the subdivision of the treated groups on the basis of age and sex.[2,3,6,7] Though there is little evidence of benefit from prophylactic megadoses of ascorbate, some manifestations of the immune response, particularly those concerning leucocyte mobility, do seem dependent on ascorbate intake. Thomas and Holt[8] have reviewed this association and the potential hazards of ascorbate therapy.

Control of infection involves polymorphonuclear and mononuclear cells which have high ascorbate levels. These levels fall rapidly during virus infection and return to normal after recovery. Subnormal levels of polymorphonuclear-leucocyte ascorbate have been observed in people with the immune depression of pregnancy[10,11], ageing,[12,13] and corticosteroid treatment.[9] Corticosteroid therapy not only depletes leucocyte ascorbate but also inhibits phagocytic activity.[9] Dietary supplementation of ascorbate increases phagocytic activity in steroid-treated subjects.[14] Similarly, macrophages from scorbutic subjects show depressed migration and do not aggregate normally in silicotic lesions.[15] Though mast cells possess high concentrations of ascorbate, immediate hypersensitivity is not clearly influenced by ascorbate. A potentiation of the effects of antihistamines in anaphylaxis has been demonstrated, but this may be mediated through unphysiological mechanisms. A depression of delayed type hypersensitivity, reversible by ascorbate supplementation, has been demonstrated in scorbutic animals, possibly due to defective migration of recruited cells to the site of challenge rather than a central defect in lymphocyte function. Whatever the basic defect, normal skin-graft rejection seems dependent upon adequate ascorbate intake.[8] The links between ascorbate intake and interferon are tenuous, but interferon production is increased in mice fed on ascorbate supplemented diets, and human embryonic fibroblasts show a similar response.[16] To date, studies of the relationship between ascorbate and antibody production and ascorbate and complement have produced contradictory results.[8]

The theoretically harmful effects of megadose ascorbate are as numerous as the potentially beneficial effects. Calcium oxalate and urate calculi, decreased vitamin-B_{12} availability, and hypovitaminosis C after withdrawal of ascorbate probably matter little in the absence of familial disturbances of metabolism. Gastrointestinal symptoms are usually reversible on withdrawal of ascorbate; pentosuria may be confused with glycosuria and effects on prothrombin time during oral anticoagulation are potentially dangerous.[17] Of greater concern are the as yet unconfirmed reports of alterations in fetal metabolism as a result of maternal megatherapy,[8] enhancement of metal toxicity, decreased tolerance of a rapid rise to high altitude,[18] potentation of aspirin-induced mucosal ulceration,[19] interactions with drug metabolism and mutagenic properties of ascorbate metabolites.[8] There seems at present little justification for long-term ascorbate megatherapy in cold prophylaxis in the general population. Perhaps it will be possible to define a subpopulation in which the benefits justify the risks.

EXAMINATION OF IMMIGRANTS

LAST week *The Guardian* reported that a 35-year-old Indian lady, arriving at Heathrow airport as an immigrant, had been examined by a doctor in an attempt to test statements about her marital condition which concerned her application for admission. The Home Secretary promptly instructed immigration officers not to ask for medical examinations whose object was to determine whether or not female immigrants had had sexual intercourse or had borne children. It is to be hoped that Mr Rees is pursuing his inquiries into how this shameful incident arose. No doubt the zeal of some immigration officers led them to believe that their duty lay in making every conceivable effort to disprove the evidence presented by a new arrival. Perhaps the view at Heathrow is that this practice is merely one way of meeting the Government's wishes on the conditions to be fulfilled by immigrants. If so, this impression will now have been forcefully dispelled. It is sad to know that a doctor agreed to comply with the immigration officer's request. When allegiances are divided, a doctor's decisions are not always simple. But certainly the best course here would have been to refuse to conduct an unjustified examination at the instigation of a presumptuous official.

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