

**Anoxia and Liver Damage**

**Q.**—*Is it true that the anoxia accompanying severe anaemia can cause liver damage ?*

**A.**—It is important not to confuse anoxic anoxia—i.e., anoxia associated with low oxygen tension—with that due to anaemia, in which the oxygen tension is usually normal. The former cannot be compensated by an increased blood flow, whereas in the latter increased cardiac output may largely make good the deficiency. That anoxic anoxia may lead to liver damage has been undoubtedly established both in men and animals (Buchner, H., *Klin. Wschr.*, 1942, 21, 721), severe cases resulting in extensive centrilobular necrosis. Uncomplicated anaemia, however, does not generally lead to necrosis: the more usual finding is some degree of fatty infiltration, as, for example, in inadequately treated cases of pernicious anaemia. On the other hand, a degree of circulatory impairment which might be innocuous in a subject with a normal haemoglobin level may well lead to anoxic liver damage in a severely anaemic subject whose liver cells have been dependent for adequate oxygenation upon an increased blood flow. Any increased metabolic activity of the liver in these circumstances may also upset the balance between supply and demand. Such an increased demand may well result from the metabolic disturbance engendered by major surgery and its accompanying anaesthetizing agents.

**Vitamin D and Bronchitis**

**Q.**—*An otherwise healthy boy of 9 years living under first-class conditions suffers from recurrent attacks of bronchitis during the winter. Would vitamin D be beneficial and, if so, has an ultra-violet lamp any advantages over direct administration? What, besides burns, are the dangers of such a lamp?*

**A.**—Scientifically conducted experiments with groups of children in Great Britain have so far failed to show that ultra-violet light externally or vitamin administration has any beneficial effect in reducing the incidence of respiratory tract infections. This does not exclude the possibility of an individual child receiving some benefit, but it makes it unlikely. The main danger of ultra-violet light, apart from burns, is the well-recognized risk of lighting up a tuberculous infection in the lungs—an unlikely event, however, in a boy of 9. There is also the point that the warming of the skin which occurs, if followed by exposure to colder conditions, may be succeeded by the sort of "chilling" which seems to precede some of the respiratory tract infections.

It may be permitted to follow this largely negative answer with some comments on the condition described. There are three possibilities which might be usefully considered: First, where is the infection coming from? If the child is "otherwise healthy" the question of infection from some other member of the household should be investigated. A sinus infection, a throat infection in mother or father with whom the children are living so to speak in symbiosis may spread to a child. Does the term "otherwise healthy" exclude the chance that the child has infection of an antrum, of the tonsils, or even a small area of collapsed and infected lung only to be recognized on x-ray examination? Secondly, has the possibility of allergy been excluded? Some cases of recurrent bronchitis in the young are in effect really asthma. Thirdly, it is fair to ask what the "first-class conditions" really mean. Overheated rooms, lack of fresh air, too many clothes, lack of exercise, or absence of precautions to keep warm after exercise may all occur at the best economic levels. Over-protection may result in lack of immunity.

**Bleeding Gums**

**Q.**—*An otherwise healthy man suffers from bleeding gums. Every morning his teeth and gums are covered with a brown nasty smelling deposit. What is the best treatment?*

**A.**—There are numerous forms of gingivitis due to many causes, and any treatment prescribed without investigation of possible causes is bound to be empirical. In general, local scaling and cleaning are indicated to keep the teeth clean and polished, thereby preventing food sticking to them, with finger-

massage to restore tone in the gums. If the pockets round the teeth are deep, gingivectomy—i.e., trimming away superfluous and swollen gums—may be undertaken. Local penicillin in the mouth is of use in acute cases, but it is not much good in long-standing cases.

**Treatment of Leucopenia**

**Q.**—*A woman aged 55 has been taking "tridione" for several months for petit mal. In four months her total leucocyte count has fallen from 5,000 per c.mm. to 3,500 per c.mm. The tridione has now been stopped. What other measures should be adopted to increase the number of leucocytes to normal?*

**A.**—It is questionable whether a fall of the total leucocytes from 5,000 per c.mm. to 3,500 per c.mm. is of any significance, unless repeated counts showed the second figure to be constant. The range for 95% of normal individuals is 4,000–11,000 per c.mm.; thus it is possible that the count of 3,500 is a solitary low reading. If it is established that there is persistent leucopenia, tridione should be stopped and the patient kept under observation. The count will almost certainly rise spontaneously after withdrawal of the toxic agent. Folic acid, pyridoxine, and crude liver extract have all been thought at one time or another to stimulate leucopoiesis; it is more than doubtful whether they exert any such action, but they are worth a trial. There is, in fact, no drug known which increases the formation of leucocytes. The most important part of treatment is the immediate control of any infection should evidence of such occur.

**NOTES AND COMMENTS**

**Splenomegaly in Thrombocytopenic Purpura.**—Dr. BERNARD MYERS (London) writes: In your reply ("Any Questions?" September 30, p. 793) you state that "palpable enlargement of the spleen occurs in about one-third of patients with primary or idiopathic thrombocytopenic purpura." In a series of cases which Mr. Rodney Maingot and I had together which from the tests and clinical observation were essential thrombocytopenic purpura, there was not a single case, clinically or at the operation of splenectomy, in which the spleen was in any degree enlarged. I found when I made this statement to medical societies in the United States that the same was the experience of the profession there.

**"Hospital Improvements."**—This booklet by Miss Olive Matthews, which was referred to in an annotation last week (p. 878), is obtainable only from the author at 22, Harrington Gardens, London, S.W.7 (1s. 6d., post free).

**Correction.**—Dr. BYRON E. HALL (Rochester, Minnesota, U.S.A.) writes: In the *British Medical Journal* of September 9 (p. 585) a paper bearing the title "Studies on the Nature of the Intrinsic Factor of Castle" was published with my name as sole author. When the manuscript was submitted to Professor Justin Besançon, secretary-general for the First International Congress of Internal Medicine, last July, I was not cognizant of the fact that it would be published, especially prior to the meeting of the Congress. The manuscript was incomplete to the extent that the names of associates who had worked with me on this project and acknowledgments to certain pharmaceutical firms had been omitted. Dr. E. H. Morgan, formerly a fellow in medicine, Mayo Foundation, and Dr. D. C. Campbell, consultant in medicine, Mayo Clinic, should have been co-authors. Moreover, acknowledgments to Merck and Company, Rahway, New Jersey, for supplying crystalline vitamin B<sub>12</sub>; to the Abbott Laboratories, North Chicago, Illinois, for extracts of hog gastric mucosa; and to the Upjohn Company, Kalamazoo, Michigan, for vitamin B<sub>12</sub> concentrate and extracts of hog duodenum should have been included.

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