CASES OF JAUNDICE.

By Major J. W. Osborne.

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During a period of six months forty-nine cases of catarrhal jaundice were treated in this hospital. No cases were treated in the winter-time.

In the early spring (April) the usual endemic cases began to appear. Two cases were reported in April—one from Lisburn and a Royal Marine from sea.

In May two cases were reported from the same unit with an intervening period of seven days.

No cases were reported in June.

In July the figure rose to three cases—one from Lisburn, one from Gilford and one from Lurgan. These features suggest the ordinary spring and autumn incidence of the disease in an endemic nature.

In August an epidemic of cases, thirty-eight in all, broke out in a unit at Coleraine. It is interesting to note that, apart from these cases, the ordinary endemic nature of the disease is still present as the remaining cases number six only with a distribution which includes widely separated areas—Ballycastle, Newry, Londonderry, Cullybackey and Doagh.

The degree of jaundice was not extreme. The usual features were nausea, malaise and gastro-intestinal disturbances, for periods varying from sixteen days to a week, followed by the onset of jaundice. All cases were jaundiced on admission except one who was admitted as gastro-enteritis. In all, the pyrexia was slight or not marked and subsided after a short period in bed.

As would be expected, the icterus index was proportionate to the degree of jaundice. All except three cases had a normal leucocyte blood picture. These three seemed to be in the early stages of the disease with slight jaundice only. The counts were never higher than 13,400 and all three showed a relative lymphocytosis which in one case was as marked as 40 per cent. Six cases had enlargement of the spleen. No case showed agglutination to Weil’s disease.

The van den Bergh reaction was carried out in all cases and the icterus index of the urine. Thirty-eight cases showed a positive diphasic reaction and two a positive indirect. In all the former the icterus index was always greater than 30, in the latter two 10 and 6 respectively. This is the picture of a haemolytic rather than an obstructive jaundice. Four cases had a negative van den Bergh with icterus indices of 5, 1, 5, and 20. No explanation can be offered for these figures.

A relationship was noticed clinically between the degree of itch and the depth of jaundice. Where the jaundice was marked, itch was nearly always present at some stage. An association was also noticed between the presence of bile salts in the urine and itching of the skin.

Pigment and salts were present together at some stage in all cases. In some, pigment was more predominant than salts, in others the reverse, but both salts and pigment disappeared together.
Clinical and Other Notes

The stools from thirty cases were examined for abnormal organisms without result.

Several observations were important. Increased leucocytosis with a relative lymphocytosis was noticed early in the disease. Enlargement of the spleen occurred in 12 per cent. of cases and early in the disease and in cases that subsequently developed a marked degree of jaundice.

An indirect van den Bergh reaction was found only when the jaundice was slight. In one case the icterus index was high—20—when the van den Bergh was indirect positive.
This suggests a pseudo-haemolytic rather than an obstructive onset. The leucocytosis in the early stage of the disease with a lymphocytic reaction and enlargement of the spleen have the characteristics of a virus infection. The whole epidemic ran a course of fourteen days from August 2 to August 16, 1941, and then rapidly subsided. The graphs show the monthly incidence.

THE EFFECT OF VITAMIN A ON DARK ADAPTATION IN SOLDIERS.

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In view of the accepted importance of nutritional factors in relation to night vision, an investigation was carried out to determine whether or not this faculty could be improved by administering vitamin A concentrates to men subsisting on ordinary Army rations.

In all, twenty-four subjects were tested. All save one had normal vision as determined by Snellen's Test Types. The exception was wearing suitable glasses. Six cases were used as controls. To the remainder, 24,000 international units of vitamin A in one capsule of prepalin (Glaxo) was given daily for fourteen days, the night vision being tested before and after this period. The estimated daily requirement of the vitamin is given as 50 units per kilogramme of body-weight per diem [7].

The photometer used was designed to test both the time taken to accommodate to a standard illumination and the minimum illumination perceptible when accommodation was complete.

All subjects were exposed to a bright light under constant conditions for a similar time before testing, in order to reduce them to a common condition of light adaptation.

The results were as follows:

A. Subjects Given Supplementary Vitamin A.

Dark adaptation time reduced in eight cases, increased very slightly in seven cases, unchanged in three.
Perception of minimum intensity of illumination improved in seven cases, very slightly diminished in four cases, unchanged in seven.

B. Controls.

Dark adaptation time reduced slightly in three cases, increased slightly in one case, unchanged in two cases.
Perception of minimum intensity of illumination improved slightly in one case, diminished slightly in three cases, unchanged in two cases.