Simple treatment of jaundice

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Introduction

MANAGEMENT OF JAUNDICE has remained a controversy till today. From the simple treatment of bed rest for the very mild jaundice of hepatitis to the most complex of diets and use of liver metabolites, such as cholin and methionine feeding, steroids, and the exchange transfusion or even total transfusion for the most severely damaged acute necrotic livers. The diagnosis and subsequent management of jaundice and liver disorders have been categorised by textbooks for simple guides to students. An accurate diagnosis of a patient may sometimes leave one in doubt as to whether it may be an intracanincular block, cholestatic jaundice, or extrahepatic obstruction or a combination of such and in a severely jaundiced patient whereby the bleeding tendency is made more acute, liver biopies or laparotomy can be a hazardous operation. Hence, any rapid resolution of jaundice with rapid repair of liver damage is welcome for this nefarious but vital organ, and simultaneously improving liver function for further investigations and management.

Case History

After 3 days of rapidly advancing jaundice, W.C.L., a well-built, 30-year-old urban male, was

admitted diagnosed as hepatitis with marked jaundice; severe nausea, vomited several times daily, right hypochondral pain and tenderness, with a soft liver palpable to two fingerbreadths below right intercostal margin. No past relevant history of note and no previous malaria, hepatitis, blood transfusion, drug treatment or native medicine. At about the same time noticed dark urine and pale stools. He had no chills or rigor but was running a low grade fever of 99°F, Murphy's sign negative and gall bladder not palpable. A provisional diagnosis of infectious hepatitis was made.

Investigations and Management

Serum Bilirubin 48 mg%, Alkaline Phosphatase 12.6 sigma units per ml, S.G.P.T. 560 S-F units/ and Thymol Turbidity 12.2 Maclagen units, urine was positive for bile salts and bile pigments, Urobilinogen (Erhlich's test) positive to dilution of 1/10. Chest X-ray normal, plain X-ray abdomen normal no radiopaquestones, Paul Burnell negative, no malaria parasites seen on blood film.

The patient was admitted on first diagnosis into hospital. He was ordered for bed rest and glucose fluids with a light fat-free diet. On alternate days, glucose 50% I.V.I. 20 ml and parentovite intravenous high potency were given, no other therapy was added. By the 4th day of treatment, his yellow tinge markedly lessened, felt subjectively well, appetite improved, nausea and vomiting subsided. Liver was palpable to 1½f. and still slightly tender.

On the 8th day after having had four injections of glucose and four of parentovite, he felt so well that he asked for home treatment. This was granted as his improvement was so dramatic. Tests repeated showed serum bilirubin 4.8 mg%, S.G.P.T. 114 S.F. unit/ml, thymol turbidity 8.6 Maclagen units and alkaline phosphatase 6.25 sigma units/ml on the 8th day. Urine still showed trace of bile and bile salts, stools were more normal colour.

He was followed up twice weekly for next 14 days at home, and his general condition improved to near normal. Liver by now was impalpable and he had only very slight icteric tinge over sclera and skin. Investigations at 22nd day showed serum bilirubin of 2.4 mg% S.G.P.T. 52 S.F. units/ml, thymol turbidity 2.6 Maclagen units. During the last two weeks, he only had two intravenous injections of glucose 50% and parentovite each alternating twice weekly without much restriction of food except to eating home cooked meals. The patient was able to resume normal duties at this stage, 22 days after a moderately severe attack of infectious hepatitis and jaundice.

Discussion

Glucose-Parentovite therapy dramatically reduced the severity of jaundice in infectious hepatitis, helped rapid repair of liver and quick return to to ambulant stage. In the light of our combined clinical experience with other cases as well, we like to discuss this simple management in general.

Glucose was given slowly intravenously 50% of 20 ml. No undue reaction occured. The parentovite as intravenous high potency paired ampoules were mixed before injection and given slowly. Parentovite was chosen as it has the correct British Pharmacopeia vitamin formulation. A close watch being made for hot flushing, drowsiness, discomfort and paraesthesia, but these were seldom encountered and usually mild, if occured, as a warm sensation and lasted for few seconds only. High doses of Aneurine may induce mild paraesthesia and rarely hypotension. But these were not encountered in this patient or on others of our patients treated by this method.

Parentovite
(Vitamins Limited, Brentford, England)

Formula

Intravenous High Potency

Paired ampoules contain	No. 1	No. 2
Aneurine hydrochloride B.P.	250 mg	—
Riboflavine B.P.	4 mg	—
Pyridoxine hydrochloride B.P.	50 mg	—
Nicotinaminde B.P.	—	160 mg
D-sodium pantothenate	—	5 mg
Dextrose B.P.	—	1000 mg
Ascobic acid B.P. (as Sodium Ascorbate)	—	500 mg
Water for injection B.P. to	5 ml	5 mg
	10 ml	

Doses for Children
(Vitamins Limited, Brentford, England)

14 years and older	—	as for adults
10 — 14 years	—	1/3 to 1/2 the adult dose
6 — 10 years	—	1/3 adult dose

All these have to be modified in individual cases.

We did not treat children under 6 years old by this method as they are unreliable witness of reactions and object to injections. The dose for

the children given from 6 years and above are as above for both the glucose 50% as well as parentovite. Equally good results were obtained from those with infectious hepatitis in children as for adults. Patients were able to be discharged after one week of management, usually after 3 ampoules of each in mild to moderate jaundice in adults. In moderately severe jaundice, patients were retained for longer periods and given two weeks of management, about six to seven injections of glucose 50% and parentovite each. No undue side effects were observed and no anaphylactoid reactions so far encountered. Mild sensation of warmth was seen in one out of 3 patients, not enough to discontinue therapy.

We feel that this is an easy, safe, not expensive and simple way of clearing jaundice of the non-haemolytic type in most patients, especially infectious hepatitis cases. But may equally be applied to improve liver function in those with surgical jaundice, alcoholic cirrhosis, drug induced liver damage, and perhaps hyperemesis gravidarum.

We have tried on similar jaundiced patients firstly glucose 50%, then parentovite alone and then parentovite in Dextrose 5% infusions; but the best and quickest clinical result obtained was still the glucose 50% alternating with the parentovite intravenously neat. The glucose helps phoshorylation in microsomal liver cell metabolism and the vitamins in parentovite, especially of the B group, may provide the catalytic enzymatic boost for the rapid repair of liver disorders. The glucose parentovite therapy seemed to have hit the right combination.

Summary

This case report is to highlight and illustrate the usefulness of glucose-parentovite therapy in jaundice patients, especially those having infectious hepatitis. Its simplicity, relative safety and ease of administration make it most useful in rural areas where no laboratory exists.

Glucose parentovite therapy for jaundice (non-haemolytic type) has the following beneficial effects.

1) It rapidly reduces the severity of jaundice, especially in infectious hepatitis.
2) Quickly improves liver function and aid liver repair, thereby shortening hospital stay by half.
3) Simple, safe and relatively inexpensive.
4) Rapidly improves patients' clinical condition to ambulant stage and rapid cure of symptoms and signs.
5) Prevents further deterioration of liver damage.

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