absorption of radioactive vitamin B₁₂ from the intestine either when administered with intrinsic factor or after a course of chlortetracycline.

The dangers of folic-acid therapy in this type of case are confirmed.

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TWO TYPES OF LUPUS ERYTHEMATOSUS CELL FACTOR, SHOWN BY INDUCED L.E. CELL PHENOMENON IN MAN

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In a previous publication we have shown that typical lupus erythematosus (L.E.) cell formation can be induced by the transfusion of plasma from cases of systemic lupus erythematosus into patients with various other diseases (Bencze *et al.*, 1958a).

The present communication reports further experiments on similar lines and shows that the plasma factor from patients with systemic lupus erythematosus may or may not be transferable.

Method

Plasma was taken from six patients with typical clinical signs of systemic lupus erythematosus in whom the L.E. cell formation had been repeatedly demonstrated. The blood was taken into citrate (16 ml. of 3.8% sodium citrate per 100 ml. of blood) and kept for 23 hours at +4° C. It was then kept at 37° C. for one hour and transfused (at 24 hours from taking).

The examination for L.E. cells was made by Zinkham and Conley's (1956) rotation method, and was positive at that time in all donors.

The recipients chosen had neoplastic disease (detailed in column 2 of the Table, which also includes the three experiments previously reported). One recipient was transfused with plasma from three systemic lupus erythematosus donors and another with plasma from two such donors. Before transfusion, the L.E. cell phenomenon was absent in all recipients.

Results

Plasma from patient O.P. produced L.E. cells in all five of the subjects transfused, even when given in amounts as small as 70 ml. (see Table). These cells lasted for between 6 and 27 days. In two of these five subjects previous transfusions from other L.E. patients had been negative. (In one of them the negative transfusion had been given from two systemic lupus erythematosus cases 21 and 26 days before, and in the other a negative transfusion was given 18 days before.) Nucleophagocytosis and tart cells were present in patient P.F. at two, four, and six hours, but no L.E. cells. The L.E. cells produced were typical and showed a positive Feulgen reaction (Bencze *et al.*, 1958b). In one of the experiments (fifth line of Table) guinea-pig complement was added *in vitro* without producing L.E. cells since Formijne and van Soeren (1958) have claimed that complement is necessary for the phenomenon. Only one other out of the total of six donors gave positive results (line 10 of Table).

Discussion

We deduce from the above experiments that the failure to show L.E. cells after transfusion of plasma from a lupus erythematosus patient is not due to a peculiarity of the recipient but because there are two types of L.E. plasma factor, one transferable and one not transferable.

Summary

Further experiments on the transfusion of plasma from patients with systemic lupus erythematosus into patients with neoplastic disease have shown that only two out of six donors gave positive results. This did not seem to be related to the amount transfused.

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Table of Results

Recipient			S.L.E. Donor			Recipient (Days After Transfusion)											Trans- fusion Reaction
Age and Sex	Diagnosis	Blood Group	Initials	Blood Group	Vol. Given ml.	2/24	6/24	1	2	4	6	8	10	15	27		
M 24	Hodgkin's disease	B	O.P.	AB	200	++++	++++	++++	++++	+++	++++	++++	++	+	+	0	
M 72	Cancer of prostate	O	O.P.	AB	200	++++	++++	++++	++++	+++	++++	++	++	+	+	0	
F 52	" " ovary	A	O.P.	AB	140	++++	++++	++++	++++	+++	++	++	++	+	+	+	
M 65	" " lung	A	A.J.	B	190	0	0	0	0	0	0	0	0	0	0	0	
M 65	" " "	A	P.J.	O	170	0	0	0	0	0	0	0	0	0	0	+	
M 65	" " "	A	O.P.	AB	180	+++	++	+++	+	++	+	0	0	0	0	0	
M 68	" " "	O	P.F.	A	200	0	0	0	0	0	0	0	0	0	0	++	
F 45	" " breast	B	J.J.	A	200	0	0	0	0	0	0	0	0	0	0	0	
F 45	" " "	B	O.P.	AB	70	+++	+++	+++	++	++	++	+	0	0	0	0	
M 60	" " prostate	AB	T.I.	A	200	+++	++++	+	+	+	0	0	0	0	0	+	