available opportunity of exposing the skin of infants wholly or partially to sunlight, even for a few minutes per day. When these measures have failed and the first signs of rickets appear (how seldom are they looked for, how seldom diagnosed!) the ultra-violet light clinic, I believe, still holds the premier place as a therapeutic measure, not only for curing rickets, but for raising the standard of general health.—I am, etc.,

Isolation Hospital and Sanatorium, Leicester, Oct. 22nd. H. STANLEY BANKS, Medical Superintendent.

## TREATMENT OF INFECTIONS WITH S.U.P. 36.

SIR,—With reference to my article on the treatment of influenza by S.U.P. 36 in the Journal of October 12th (p. 662), I have received several letters from epidemiologists interested pointing out that there is a serious omission in not giving the exact number of the control non-injected cases. It is also pointed out that the exact figures for each case, both of the non-injected as well as of the injected, should be given.

In the original typescript there was a table giving these figures in detail; this was omitted to save space. I myself suggested that it was not really necessary to print this. On consideration, however, it seems to be rather important, as its omission suggests that my controls might have been few and my records of their progress scanty. I would therefore ask you to be good enough to publish the table with this short explanation as an addendum to my paper.

May I take this opportunity of disclaiming any responsibility whatsoever for the offensive and misleading publicity which has been given to my paper in the lay press?—I am, etc.,

Halifax, Oct. 18th.

R. M. PEARCE.

\*\* We appreciate Dr. Pearce's desire that the exact figures for each case—non-injected as well as injected—should be given, and gladly accede to his request for publication of his table. It is as follows (patients' initials have been omitted).

Patients Not Injected.							Patients Injected.						
Case.	Sex and Age.	P.	н.	M.P.	D.B.	D,W.	Case.	Sex and Age.	Ρ.	Н.	М.Р.	D.B.	D.W.
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 6 17 18 9 20 1 22 23 24 25 6 27 28 9 30	F. 52 F. 30 F. 55 F. 38 F. 55 F. 30 F. 26 F. 26 F. 26 F. 26 F. 27 M. 30 F. 24 M. 50 F. 24 M. 50 F. 24 M. 25 F. 24 M. 25 F. 24 M. 35 M. 35 M. 35 M. 30 F. 30 M. 30 F. 30 M. 30 F. 30	332453433232322+433322232 2324	422132123211312242122223222332	475432633211222256533245242527	584586667644644675566667555758	10 21 14 24 23 18 14 12 12 11 21 12 12 12 12 12 13 14 14 14 14 14 14 14 14 14 14 16 16 16 22	1a 2a 3a 4a 5a 6a 6a 7a 8a 12a 11a 12a 11a 12a 11a 12a 21a 22a 22	M. 26 M. 19 M. 35 M. 24 F. 27 F. 32 M. 46 M. 46 M. 47 F. 35 M. 47 F. 36 M. 47 F. 36 M. 47 F. 36 M. 48 M. 48	11111211122121111 212111 11132211111	111122612211121122261111112   112112121111111	22751412-51-53211-51412151122355   11-514-5222111111	331233232543425145272232241   5511133355221221	7 14 6 6 6 7 9 4 4 10 5 12 14 4 6 5 5 6 10 2 7 7 25 3 10 7 9 10 3 7 7 1

\*This patient (ase 27a) developed pneumonia P=\verage duration of pvr-xia in days H=Average duration of headache in days. M.P=Av rage duration of muscular pain in days. D.B.=Average number of days in bed. D.W.=Average number of days off work.

SIR,—The following observations upon the action of S.U.P. 36 and its allied compounds are put forward partly as a tribute to the genius of Mr. J. E. R. McDonagh, and partly to correct an impression gained from Dr. Thomson Brown's letter (October 26th, p. 785) that the utility of S.U.P. 36 begins and ends with catarrhal conditions. This is one of the hardest fields on which to assess its merits. I have been using these drugs since their commercial inception, and, like Dr. Douthwaite (October 19th, p. 739), I was disappointed with their effect in the first series of catarrhal conditions that I treated. The few rapid cures that occurred might have been explained by coincidence, particularly as I myself did not respond to injections for colds in any dramatic manner. I was subsequently induced to read the two volumes of The Nature of Disease, after which my interest in these remedies was renewed.

In order that the use of S.U.P. 36 may not suffer an untimely extinction its limitations must be realized. The whole conception of this group of drugs is founded upon a pathological theory which must be accepted, at any rate in part, as a working basis for their rational exposition. This theory is apparently so opposed to any classical teaching that we all must hesitate before admitting its truth. Ultimately one is convinced that the broad outlines are in accord with observed facts, and that the theory represents the nearest attempt yet made to reduce clinical medicine to an exact science. I give a brief list of diseases in whose treatment S.U.P. 36 has proved specific.

Hypercmesis Gravidarum.—In severe vemiting of pregnancy 0.01 gram daily till vemiting ceases: I have never had to give more than three doses. This result is borne out by several of my colleagues, who have so far reported no failure.

Pyelitis.—A simple case—for example, resulting from a B. coli infection—will yield to two or three injections of 0.01 gram on alternate days. The administration may be followed by rigors, which are slight and in no way dangerous.

Broncho-pneumonia in Children.—A daily dose of 0.005 to 0.01 gram till the temperature drops: this seems an absolute specific.

Venous Thrombosis.—I give 0.01 gram every three days for three to five doses. The results are constant and sometimes dramatic; the usual time of resolution (six weeks) is at least halved.

Ostcomyelitis.—If the infection is staphylococcal S.U.P. 36 will often resolve the condition without operation, and even if suppuration occurs it is far more superficial and localized than in an untreated case. In streptococcal cases S.U.P. 468 in 0.002 gram doses is necessary to effect an improvement.

Acute Cystitis.—These cases respond well to daily doses of 0.01 gram, and resolved in a few days.

Acute Mastoiditis.—I have treated with S.U.P. 36 every case of acute mastoiditis that has come under my care in five practices for two and a half years, and every one has resolved after two successive doses of 0.01 gram, leaving, in two cases, an otitis media, which soon cleared up of itself, and in the others septic tonsils, which were subsequently removed. As a routine these patients should be admitted to hospital or carefully watched, as it is too dangerous to regard the results of so small a series as evidence of a certain cure. So far, however, an immediate improvement has occurred from the first, and after the first twelve hours local surgical intervention has become quite unnecessary.

For the past two years every patient of mine submitted to major operation in the Victoria Hospital, Deal, has received 0.01 gram of S.U.P. 36 before operation, with a view to diminishing or preventing post-anaesthetic vomiting. That this result is achieved is difficult to prove, as most patients vomit at least once on returning to consciousness. A definite improvement in their general condition the day after operation is certainly evident. On no account should S.U.P. 36 be given during or immediately after anaesthesia, as there is grave risk of inducing pulmonary thrombosis; I have given it safely eight hours after operation. Post-operative pneumonia does not occur, even after partial gastrectomy; and post-operative sepsis and stitch abscesses are reduced almost to nil.

In conclusion, may I suggest to Dr. Thomson Brown that the specific for boils is manganese butyrate in 1 c.cm. doses of a 1 per cent. solution, and that a streptococcal infection of the throat will rapidly resolve with S.U.P. 468. So also will crysipelas and barber's rash, both of which are refractory to ordinary therapeutic measures.—I am, etc.,

Walmer, Oct. 26th.

JAMES S. HALL.