years. I believe one of the greatest causes of this increase in deaf children is inadequate treatment with antibiotics. After twenty-four hours of oral penicillin the pain of otitis media disappears and the child feels better. This leads to a premature cessation of treatment. Too often children with measles are given antibiotics to prevent "complications," whereas they frequently mask otitis media. Because the ear drum is not red it does not mean all is well in the middle ear. The retracted drum, the white drum with a few vessels coursing over it, the yellow drum, the black drum, or the drum with a "hairline" across its middle all indicate underlying disease. These are all physical signs that are becoming more and more common but are infrequently recognized. Simple tests for hearing should always be carried out after treating otitis media.—I am, etc.,

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C. PETER MILLS.

SIR,—The problems presented by the catarrhal child touch everyone who has to do with children—the parents, teachers, physicians, and neighbours. It may be that the intractability of the condition, vividly described by Dr. D. H. Garrow, arises from too narrow a concept of the condition itself (20 March, p. 773).

Dr. Garrow sees upper respiratory catarrh as a phenomenon of infection, and counts six infections per annum as a usual norm for schoolchildren. However this may be, the fact remains that, although the degree of exposure to this type of infection varies little from child to child, not all children succumb. This variability raises the question whether other factors than infection itself determine the resistance of some children and the non-resistance of others.

Something may here be gained by considering the condition from the child's point of view. To the onlooker the central fact may well be, as Dr. Garrow suggests, the mucus pouring down the child's upper lip, but to the child the core of the situation is the diminished ability to do his school work, to enjoy his food and to maintain a general sense of well-being, that nasal blocking brings about. A child who cannot breathe through his nose during the day and who is constantly woken during the night by a similar inability is a child under a depressing and constant disability in comparison and competition with his fellows, which soon comes to act as a vicious circle. He finds he cannot compete; he comes to think of himself as a person who essentially cannot compete.

Can psychiatry be of any use as a clarifying factor to our conceptions? I believe it can. Every psychiatrist successfully practising psychotherapy has known the occasional patient who comes to a treatment session with a "streaming cold" and leaves at the end with a dry nose. Some new set of circumstances, that is, within the body have halted the output of fluid.

Let us therefore return to consideration of the condition itself. What we observe is a swelling of the mucus lining the upper respiratory channels, with persistent output of a considerable quantity of fluid. Could the quantity of this fluid give us a hint of another angle from which to tackle the condition?

In various places on the Continent the view has for long been current that fluid-producing

conditions can arise in the body other than those following infection. When such a condition is suspected (other, of course, than those due to serious organic disease) treatment is directed towards endeavour to arrange for the discharge of fluid through the normal organs, skin, intestinal and urinary tracts, with in most cases subsidence of discharge from the affected area.

For example, with a child subject to recurring catarrh of the upper respiratory tract the mother would be instructed to take immediate measures to bring the skin into play, through hot bath, bottles in the bed, a warm blanket completely enveloping the child, and hot vitaminized drinks, such as Ribena, rose-hip syrup, etc., and water, until vigorous sweating results. The child would then be rubbed down, changed into clean dry pyjamas, and given as much hot drink as he could be induced to take at frequent intervals and a saline aperient. The following day would be spent in bed with again as much hot fluid intake as possible. If good evacuation has not been secured the saline aperient is repeated. The third day the child should be up in a warm room, well amused, and on a diet of salad and fruit. In my experience, by the following day the child is well.

The advantage of this mode of treatment is that no drugs are used, the child's sense of inadequacy is comforted and restored by parental attention, the mother's anxiety relieved by having "something to do," and, in experience of a very long line of catarrhal children, once the initial attack is checked the child gains in vitality, begins to eat well, can breathe with ease, once more sleeps soundly at night, regains confidence, and, unless quite untoward circumstances intervene, succeeds in normally mastering future infection.

Supposing, however, the catarrh returns, antibiotics can be used in combination with measures directed towards skin, intestinal, and urinary evacuation, and with increasing vitality in the child the condition comes under control, sequelae do not develop, and the child joins his infection-resistant fellows.—I am, etc.,

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MARGARET LOWENFELD.

Transfusion and Anaemia

SIR,—Your leading article (20 March, p. 744) rightly underlines the dangers of transfusion in anaemic patients. In anaemia of moderate degree (5–8 g. haemoglobin/100 ml.) it is unusual for heart failure to be a problem unless organic cardiac disease is also present. These patients may safely await the effect of the appropriate haematinic. However, in a busy general hospital, out of several patients with severe anaemia (below 5 g. haemoglobin/100 ml.) admitted each year, two or three will have severe congestive cardiac failure when they are first seen. Despite digitalis, diuretics, and careful nursing, these patients are in danger of dying from the cardiac complication in the five or more days before they can achieve any useful response to the haematinic.

These patients require transfusion but we disagree that "elaborate exchange transfusion" as used by Fullerton and Turner¹ is necessary. The precautions you mention (not more than 500 ml. blood given no faster than 1 ml./kg. body weight/hour) must be observed, but in addition careful observation of the patient is vital. The most useful sign of circulatory overload is an increase in pulse-

rate, and in our view is more sensitive than any of these you enumerate. The tachycardia, associated with both the anaemia and the heart-failure, will normally fall as the haemoglobin rises, and a chart of pulse-rate taken every 15 minutes during transfusion will reveal this. If over-transfusion occurs the pulse-rate will rise. Venepuncture and removal of 20–30 ml. of blood is usually effective in reversing the trend, but if not a simple method of exchange transfusion may be used.

The long saphenous vein or cephalic vein is exposed and opened. The infusion is given into the proximal end through a plastic Guest cannula. A tapered cannula (Portex nylon i.v. cannula) is tied into the distal end of the vein, and through this the patient's blood may be aspirated by a syringe. The cannula is flushed occasionally with dilute heparin solution.

By this means 500–1,000 ml. of blood may be given in 3–4 hours without any appreciable alteration in blood volume, and with immediate visible benefit to the patient.—We are, etc.,

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REFERENCE

- Fullerton, W. T., and Turner, A. G., *Lancet* 1962, 1, 75.

Treatment in Depressive Illness

SIR,—As one of the physicians who participated in the M.R.C. trial of treatment in depressive illness (3 April, p. 881), may I draw attention to a feature of the clinical assessment which was not mentioned in the report and which, I think, might be important? In making their progress reports the physicians were required to rate "dryness of mouth" as being either absent, moderate, or marked. Our instructions did not indicate how this information was to be elicited, but I expect that, like myself, most physicians elicited it by direct questioning of the patient. Since dryness of the mouth is well known as one of the commonest side-effects of imipramine this item of information may have biased physicians when they came to make their overall ratings of the patients' clinical state. It would seem possible to test for such bias (a) by determining the proportion of patients, recorded as having dryness of the mouth, who were in fact on imipramine, and (b) by comparing the progress of imipramine patients not so recorded. I suggest that a consideration of this possible bias is important because at present all the significant advantages found for imipramine over phenelzine and placebo could be accounted for in terms of this bias. The bias might also explain the rather surprising sex differences found in the response to imipramine. The records might be examined, for example, to determine whether dryness of the mouth was more common or more prominent in males.

In the physicians' progress reports the principal clinical manifestations of Table VI were assessed before dryness of the mouth and were therefore probably free from the bias. We are not told which of the differences in the mean ratings of Table VI were significant, but those between the drugs do not, for the most part, appear very great. In particular, there is no difference at all