

pills until he is feeling really ill, by which time they are of little help to him. The result is they fall into disrepute and few bother to take them. There being no "dramamine" available, I tried the effect of "benadryl." Its superiority over hyoscine was at once apparent and it became very popular, though again no one applied for it until feeling really ill. Many who were completely incapacitated were able to carry on their work as usual, though some complained of drowsiness.

Recently a small supply of dramamine came into my hands, and I was able to compare its effects with benadryl. Here, again, the pills were not taken until the patient was actually feeling ill.

The results were as follows:

Antihistaminic	No. of Cases	Complete Relief	Partial Relief	No Effect
Dramamine .. ..	30	10	9	11
Benadryl .. ..	30	19	6	5
Total .. ..	60	29	15	16

Of 17 cases who have tried both compounds at different times, five preferred dramamine, nine benadryl, and three found them equally effective. Drowsiness was complained of by two with dramamine and five with benadryl. No toxic effects were noticed, but it has never been necessary to continue treatment for longer than three days at six-hourly intervals, owing to improvement in the weather.

This is admittedly a small series of cases, but it would appear that benadryl is at least as effective as dramamine, if not more so, which is interesting in view of the ready availability of the former and scarcity of the latter.—I am, etc.,

J. M. PALMER,  
Surgeon Lieutenant, R.N.V.R.

SIR,—I have been a very poor sailor all my life, during which time circumstances have taken me across the North Sea twenty times or more. I was invariably sea-sick unless the sea was dead calm. About fifteen years ago I tried hyoscine hydrobromide to help the sea-sickness. It certainly improved matters, as on comparable seas without it I would have been actually sick. As it was, provided I lay still and quite flat the journeys were endurable on a slight sea. If really rough, it appeared to make no difference, and the nausea continued on land up to 48 hours afterwards.

This summer I started the sea journey on hyoscine and went up to breakfast, where I toyed queasily with a grape-fruit; later I was sick. The stewardess provided me with "dramamine," which sent me to sleep for four hours. Then, although the sea was rougher, I got up perfectly well, and enjoyed a dinner of roast duck, ice with whipped cream, and blue cheese. After the holiday the sea was worse on the return journey, but, thanks to dramamine, I was up and present at all meals the entire journey, and next day on shore I was perfectly well.

Personally, I cannot praise dramamine too highly as a sea-sick cure.—I am, etc.,

Birmingham.

ENID HOUGHTON.

SIR,—As an inveterate sufferer from sea-sickness, and, like my friend Dr. M. F. Bethell (October 7, p. 836), a recent ship doctor, I would disagree with his conviction that "dramamine" is superior to the hyoscine preparations.

I was asked by the medical superintendent of a shipping line to carry out a trial of this drug, at that time in short supply. In cases of severe sea-sickness I could not repeat the spectacular results claimed by the Americans despite the usual methods to make the sufferers retain the drug. I often found it ineffective or definitely inferior to hyoscine in warding off impending attacks.

In my own case the recommended dose of dramamine was very alarming; a sense of impending doom convinced me that the proof of this pudding lay in the individual. I would agree with Dr. C. Grantham-Hill that there are many individual types of sea-sickness.—I am, etc.,

Chertsey, Surrey.

JOHN C. L. ADAMS.

### Objective Assessment of Symptoms in Rheumatoid Arthritis

SIR,—Progress in rheumatoid arthritis is difficult to assess, and it is not surprising that clinicians relatively inexperienced in the rheumatic diseases have reported results of treatment with such agents as desoxycorticosterone acetate (D.C.A.) and ascorbic acid that conflict with the findings of specialized rheumatism units.

Steinbrocker's system of defining the stage of disease, the functional class of the patient, and his method of assessing the progress made, have been used with success in following a group of patients at the rheumatism clinics of the Leeds General Infirmary and the Royal Bath Hospital at Harrogate. This system is of use only in assessing clinical change over a period of months, and it is quite unsuitable for assessing such rapid change as may follow the administration of such therapeutic agents as cortisone and A.C.T.H.

Any objective test which will measure clinical change or improvement is of importance. C. E. Quin, R. M. Mason, and J. Knowlden (*Journal*, October 7, p. 810) describe four so-called objective tests. A series of cases of rheumatoid arthritis treated with D.C.A. and ascorbic acid, in which similar tests were performed, was reported last year with negative results.<sup>1</sup> I feel that it is necessary to point out that none of the tests performed are entirely objective, and all with the exception of the "walking test" are difficult to measure accurately. Considering these tests in turn, it will be seen that none are entirely objective.

*Joint Tenderness.*—This is, of course, a subjective test. Even with the use of the analgesiometer (Kellgren), variable results can be obtained. In performing such a test it is essential that preliminary examination of the patient should show that the tenderness is not varying from day to day or at different times of the day.

*Grip Test.*—I have used this test on more than a hundred patients, and, if the method of gripping the bag is always the same, consistent results can be obtained in the normal and rheumatoid subject. However, a slight variation in the method of holding the bag produces a considerable alteration in the level of mercury. This can be demonstrated easily by anyone wishing to try it. Again, too, the co-operation of the patient is necessary. It is important that such measurements are taken at the same time of the day and at approximately the same room temperature.

*Range of Joint Movement.*—I have measured the range of movement of joints in rheumatoid patients who are not receiving active therapy, and a variation of ten degrees was often found from day to day. The range through which a patient will move a joint within the limits of fixed deformity will depend upon muscle spasm and local pain—again, subjective. Temperature has a great influence on muscle spasm, and I have on several occasions seen a joint which was clinically fixed move through forty-five degrees following local heating.

The shoulder-joint is one of the most unsatisfactory joints in the body for accurate measurement. From the article it appears that the angle was measured by one observer before the injection and by a different observer after the injection. Even using skin markings and instrumental aids, the readings of different observers measuring the same joint will show a considerable variation.

Using joint movement as a help in assessing clinical change in rheumatoid arthritis, it is essential to use a joint with a simple movement—e.g., the knee or elbow. Preliminary skin marking and the use of a long-armed goniometer are essential. Comparisons should be made between the range of movement measured, and not the actual limit figures. I cannot see how differences of five or six degrees in the range of shoulder movement can be measured without instrumental aid.

*Walking Test.*—The key sentence here is, "Walk as quickly as possible," and this functional test must have a subjective element. In discussing this and other similar tests at the spring meeting of the Heberden Society, at Manchester, 1950, I mentioned that the walking test was the one I had found most valuable in practice.

There are certain objective tests available, and I am surprised that Quin and his colleagues have been unable to establish a satisfactory method of measuring joint swelling. The method I employed (again limited to accessible joints like the knee and wrist) was to mark out with silver nitrate the maximal circumference of the joint. This line must completely encircle the limb. Parallel to this line, and at a distance governed by the size of the limb and joint—e.g., 2 in. (5 cm.) for the knee-joint—are drawn two other circumferences, one distal and one proximal. The use of these three measurements gives a satisfactory estimation of joint swelling.