

Dr. LAWRASON. No, the double-blind study is not new. It has been used for many years. However, the difficulties involved in rheumatoid arthritis includes the subjective character of the observations to be made. It is extremely difficult to construct a valid control study under these conditions, where active therapy is usually in the background.

Mr. GORDON. Have you any idea how many years controlled trials have been in use? I am not saying double blind, necessarily, but controlled.

Dr. LAWRASON. Are you referring to clinical controls?

Mr. GORDON. Yes, well-controlled clinical trials.

Dr. LAWRASON. This is nothing new. I would hazard a guess of 20 years or more.

Mr. GORDON. You may be interested to know that as a result of some research, I discovered that well-controlled clinical trials were conducted in the 18th century, about 225 years ago. It is in this book by Lind "On Scurvy," that discusses a wonderful trial he did, and I am going to include it in the record at this point, with the permission of the chairman. It is a short description of this particular trial.

(The article follows:)

[From Lind's Treatise on Scurvy, edited by C. P. Stewart and D. Guthrie, University of Edinburgh Press, pp. 145-146]

OF THE PREVENTION OF THE SCURVY

As the salutary effects of the prescribed measures will be rendered still more certain, and universally beneficial, where proper regard is had to such a state of air, diet, and regimen, as may contribute to the general intentions of preservation or cure; I shall conclude the precepts relating to the preservation of seamen, with shewing the best means of obviating many inconveniences which attend long voyages, and of removing the several causes productive of this mischief.

The following are the experiments.

On the 20th of May 1747, I took twelve patients in the scurvy, on board the *Salisbury* at sea. Their cases were as similar as I could have them. They all in general had putrid gums, the spots and lassitude, with weakness of their knees. They lay together in one place, being a proper apartment for the sick in the forehold; and had one diet common to all, *viz.* water-gruel sweetened with sugar in the morning; fresh mutton-broth often times for dinner; at other times puddings, boiled biscuit with sugar, &c.; and for supper, barley and raisins, rice and currants, sago and wine, or the like. Two of these were ordered each a quart of cyder a-day. Two others took twenty-five gutts of *elixir vitriol* three times a-day, upon an empty stomach; using a gargle strongly acidulated with it for their mouths. Two others took two spoonfuls of vinegar three times a-day, upon an empty stomach; having their gruels and their other food well acidulated with it, as also the gargle for their mouth. Two of the worst patients, with the tendons in the ham rigid, (a symptom none of the rest had), were put under a course of sea-water. Of this they drank half a pint every day, and sometimes more or less as it operated, by way of gentle physic. Two others had each two oranges and one lemon given them every day. These they eat with greediness, at different times, upon an empty stomach. They continued but six days under this course, having consumed the quantity that could be spared. The two remaining patients, took the bigness of a nutmeg three times a-day, of an electuary recommended by an hospital-surgeon, made of garlic, mustard-seed, *rad. raphan.* balsam of Peru, and gum myrrh; using for common drink, barley-water well acidulated with tamarinds; by a decoction of which, with the addition of *cremor tartar.* they were gently purged three or four times during the course.

The consequence was, that the most sudden and visible good effects were perceived from the use of the oranges and lemons; one of those who had taken them, being at the end of six days fit for duty. The spots were not indeed at that time quite off his body, nor his gums sound; but without any other medicine, than a gargarism of *elixir vitriol*, he became quite healthy before we came into Plymouth, which was on the 16th of June. The other was the best recovered of any in