Painful Injections

SIR,—Dr. Bousfield's letters have been both timely and practical, but I should much like to know whether his objection to the possibility of aspirating spores into a syringe from the air has any basis in fact. While not denying the possibility, I am sure that it would interest many of us to know whether any harm has ever resulted from it occurring. How much does the customary dab of spirit do to prevent sepsis (personally I always use iodine), and how many cases of trouble arose from the innumerable hypodermic injections given during the war through completely unsterilized skin? While not advocating any departure from aseptic principles, I believe that many of us, as scientific men, would like an answer to these questions. Furthermore, while always using sterilized water if available, I have never had any trouble from washing out my syringe with cold water running straight from the tap. Is the local water supply peculiarly sterile, or is the body well able to deal with an occasional bacillus introduced under the skin with the minimum of trauma?

There is one practical point about injections which has not so far been mentioned. Some people, usually, I think, of the fat type whose skin puckers on being pinched, have a peculiar kind of subcutaneous tissue in that, if pricked, the track of the needle remains patent for a short while. As a result, solution injected a good inch under the surface will often exude after the needle is withdrawn. Haemorrhage in these people may come from a deeper layer than could be detected from examination of the avascular areas. They seem more liable than most to get "bad arms." Such cases may, I believe, be due to bacteria being rubbed by the patient into the still patent orifice made by the needle. Since I have made a practice, in this type of patient, of keeping up digital pressure for a minute or so after the needle is withdrawn I have had much greater freedom from bleeding or regurgitation of fluid and no inflammatory reactions.

I would also like to draw attention to the valuable suggestion of keeping a little air in the syringe when injecting any painful solution intramuscularly. If this bubble of air is injected after the solution it cleans out the needle and helps to prevent a painful track forming in the subcutaneous tissue.—I am, etc.,

Winsford, Cheshire, Feb. 5th. W. N. LEAK, M.D.

Pruritus Ani

SIR,—I find that my letter in the *Journal* of January 20th (p. 123) has elicited two replies—one corroborative, the other critical. Mr. A. S. Morley (February 3rd, p. 216) accuses me of "the common error of writing on pruritus ani as if it were a disease *sui generis*, and of referring to it as being 'curable' by *x* rays." Well, in its idiopathic form, which is very common, it is as much a disease entity as many other symptom-complexes whose title is not disputed; and if to be freed for several years by a single course is not a "cure," at least most patients are content to call it so.

It is true that the radiotherapeutist sees a much higher proportion of idiopathic cases than obtains in general practice. In view of the care and skill exercised by the modern general practitioner, this is inevitable. The causes enumerated by Mr. Morley are well known to the family doctor—more particularly the role of parasites. The average case which is sent to the consulting radiologist has been carefully investigated, and there are thus *a priori* grounds for believing it to be of idiopathic type. As *x*-ray treatment is convenient, clean, and quick in its results, there is no reason for not trying it. Failure or quick relapse is in itself of diagnostic value, as it indicates that there is some cause which will probably be discovered by more intensive search—or that the condition is, in the particular patient, of neurotic origin.

There are two other points in Mr. Morley's letter which I should like to touch upon briefly. He mentions "anaesthetic remedies or *x* rays" in conjunction, as though there were some similarity between them. Now I understand that Mr. Morley is an authority on anaesthesia, but obviously he is not a safe guide as to *x*-ray action. Those of us who have studied it most know little about it, but it is at least certain that *x* rays in suitable doses stimulate the skin and underlying tissues to resist microbial invasion. This is evident in the treatment of acne, and no one who has seen the dramatic drop of temperature in acute erysipelas after one or at most two *x*-ray applications could possibly doubt it. Then there is the matter of operation for haemorrhoids. I assure Mr. Morley that I had no thought of taking part in a controversy between surgeons who "operate" and those who "inject." I used the word "operation" to cover any mechanical procedure for the destruction of piles.—I am, etc.,

London, W.1, Feb. 6th. F. HERNAMAN-JOHNSON.

X-Ray Cinematography

SIR,—You were kind enough to insert a notice in your issue of December 25th, 1926, with reference to a paper I was reading before the Röntgen Society on January 11th, 1927, on my work in connexion with *x*-ray cinematography. This work was initiated by me in 1921, and a thesis submitted to the University of Cambridge in 1925. Subsequently to the paper read before the Röntgen Society, I read a paper before the American Roentgen Ray Society, and showed some films of a thorax, etc., in September, 1927. The account of this was published in the *American Journal of Roentgenology* in May, 1928. During the latter end of the past year I have succeeded in bringing the subject to a really practical issue, and have been able to obtain *x*-ray cinematograph films of all the moving parts of the human body; more especially I would mention the movements of the stomach and intestines after the administration of a barium meal.

It is thus possible to study abnormalities in the alimentary tract. Movements of the heart and thorax were obtained some years ago; I was able to show these in 1925.—I am, etc.,

RUSSELL J. REYNOLDS, C.B.E.,
London, W.1, Feb. 9th. M.R.C.P.

Treatment of Early Breast Cancer by X Rays

SIR,—The discussion upon radiotherapy at the recent Radiological Congress, together with the views expressed in your columns from time to time, make clear the lack of co-ordination and co-operation between English radiotherapists. This, I think, is to be deplored, since it precludes any possibility of progress in this important branch of modern medicine. If a correct evaluation of deep therapy is to be achieved, it can only be done by careful comparison of results between practitioners employing exactly similar methods. I am therefore tempted to suggest a definite line of treatment in early breast cases, in the hope that some colleague will adopt the method and make it possible to compare results at some future date.

I specify *early* cases (and naturally infer those showing no obvious extension to glands or elsewhere), since they alone will prove or disprove the efficacy of the method. Nevertheless, there seems to me no valid reason why it should not be employed even in advanced cases. Our main problem in these, as indeed in all malignant cases,