very many more patients than the thirty here reported, but for certain reasons it is only possible at the moment to have access to the complete notes, with medicine cards, of these thirty. Both in the recorded cases and in the more numerous unrecorded ones there have been no complications other than the usual nausea and vomiting, and the incidence of the latter would appear to be lower rather than higher than that always experienced in any series of cases treated with sulphapyridine. There has been no cyanosis whatever.

Magnesium sulphate and saline purgatives in general have been forbidden to cases receiving sulphapyridine or prontosil, as such a combination is said to cause cyanosis. If this is really so it is again unfortunate, because there are certain types of case requiring both drugs. I refer particularly to those frequent cases of head injury in which there is both an actual or a potential infection of the brain or scalp and the existence of a state of high intracranial pressure due to oedema and congestion of the brain. Perhaps less important in war are those cases of high pressure due to cerebral tumour, etc., which develop an infection—for example, a pneumonia after operation. These cases require sulphapyridine for their infection and also magnesium sulphate by various routes for cerebral dehydration. Both at the National Hospital for Nervous Diseases, London, and at Horton I have dehydrated such patients by oral and rectal magnesium sulphate during sulphapyridine medication without anything untoward arising.

This short paper has been written because it is felt that patients receiving sulphapyridine can safely be given pentothal and magnesium sulphate at the same time. Although this is not directly concerned with the matter of diet one is caused to wonder whether various sulphur-containing foods, such as eggs, need be withheld from the now very numerous patients receiving sulphapyridine.

USE OF PROFLAVINE AND ACRIFLAVINE IN A THROAT AND NOSE DEPARTMENT

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Various preparations of proflavine and acriflavine have been widely used as antiseptics for a number of years now. Although much has been written about them we consider that our experience of the application of some of these to certain phases of the work of a throat and nose department is encouraging enough to warrant a brief communication. We shall confine ourselves to two of the most striking examples of the efficacy of these antiseptics. One refers to a special method of treatment of a malignant condition from which septic complications have now been eliminated, and the other to the prevention of post-operative scarlet fever such as is encountered from time to time in these special wards.

Malignant Tumours of Accessory Nasal Sinuses

In a previous communication one of us described the definite place which proflavine oleate had come to occupy in certain spheres of radium therapy (Charteris, 1937). Among those only briefly mentioned then was the treatment of malignant tumours of the accessory nasal sinuses,

for which experience has led us to favour as a rule exploration of the affected part combined with cavitary application of radium. The antrum is opened by the Caldwell-Luc method and the tumour tissue scooped out. Any invasion of the bony walls is noted, and the antro-nasal wall removed if necessary. In almost every case the operation is carried on so as to throw the antrum, ethmoid cells, and even the sphenoid sinus into one more or less regular cavity: this procedure, though extensive, is not dangerous, and enables one to see clearly how far the gross disease has progressed. Into the convenient cavity so formed a series of radium applicators of known output is placed, and held in position with packing. We do not intend here to say anything of the method except that a uniform dosage can be obtained, giving excellent results. The applicators are left undisturbed for seventy-two hours, and the parts therefore tend to become very septic and foul, causing the patient much distress. Moreover, various septic complications may ensue: the most important of these is localized osteomyelitis. We have not observed meningeal infection. Before the employment of proflavine oleate in 1936 sepsis constantly ensued, and, although rarely so serious as to threaten life, gave rise to unnecessary suffering and retarded convalescence, probably also interfering with the response of the tumour to the radium treatment. Soaking of the packing in proflavine oleate (1% in liquid paraffin) at once ended all gross sepsis where other procedures had failed. The patients now have very little discomfort, the temperature never shows more than the usual transient reactionary rise of about 1° F. on the day after operation, and not only does the packing come away without sticking but it is reasonably clean and almost free from objectionable odour. No local or other complications have followed treatment since then, even where the field has been very extensive, nor have the usual troublesome crusts formed afterwards in the affected zone. So remarkable a result, maintained over four years now, may well suggest other uses of this material in cases in which a temporarily closed cavity must be kept clean. It is not necessary to stress the importance of combating infection in a region subjected to radiation in dosage adequate to deal with malignancy.

Prevention of Post-operative Scarlet Fever

The second way in which such a preparation has been helpful is concerned with the prevention of infectious disease in throat and nose wards. Many of the cases are inevitably complicated by local sepsis, and the occasional occurrence of infectious disease after operation is a general experience: the chief difficulty is with post-operative scarlet fever. Such infections are not only unfortunate from the patient's point of view, but cause disorganization, since the ward affected has to be closed for a suitable period. Some six years ago the routine was established of giving all patients a mouth-wash and gargle of watery acriflavine 1 in 5,000 twice daily: this was started immediately on admission and was continued throughout the stay in hospital. Before the introduction of this simple measure one of the throat, nose, and ear wards had been closed no fewer than thirteen times during the preceding winter, and this was by no means an exceptional frequency, but since then the two wards have not had more than a total of five cases of post-operative scarlet fever up to date. This practical proof of the efficacy of acriflavine is not less striking than the first example when one realizes that the change is due entirely to a single procedure of extreme simplicity, and that the good result has also been maintained over a period of years.

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REFERENCE

Charteris, A. A. (1937). *Lancet*, 2, 627.