showed crystal clear fluid under normal pressure. Microscopic examination showed no cells, and the protein content was 35 mg./100 ml.

It was possible that the hypertensive crisis might be a consequence of the drug therapy. In case the administration of pethidine was a contributory factor, she was treated with a forced acid diuresis and a minimal urine pH of 4.9 was obtained. The blood pressure started to fall and by 10 hours after the ingestion of morphine, the systolic level of 130/90 mm. Hg was maintained. The blood pressure remained normal during the rest of the stay in hospital, and on follow-up one month later she was normotensive and asymptomatic, with no signs of ischemic or hypertensive complications.

Sympathetic amines contained in preparations for the symptomatic relief of nasal congestion are made up in free- or slow-release forms. Tonks and Lloyd reported two cases of hypertensive crisis caused by slow-release forms of phenylpropanolamine, and in one case, a severe hypertensive attack was observed. Similar cases have been reported, including one in which a 36-year-old woman experienced a severe hypertensive crisis due to the slow-release form of phenylpropanolamine.

**Hypertension from Cold Remedies**

**Sinusitis**—The paper published by Dr. M. F. Cuthbert and others (15 February, p. 404) prompts me to report the case history of a patient seen recently in Leeds.

A 36-year-old woman was admitted with a history of severe headache and sudden onset of photophobia in the right eye. A lumbar puncture revealed subarachnoid haemorrhage, and the patient was transferred to a tertiary hospital.

The patient's symptoms included severe headache, vomiting, and photophobia. A lumbar puncture confirmed the diagnosis of subarachnoid haemorrhage, and the patient was admitted to the intensive care unit.

The patient was treated with aggressive hyperventilation and hypocarbia, and the blood pressure was maintained at a level of 130/90 mm. Hg. The patient made a complete recovery, and she was discharged from the hospital after four days in intensive care.

**Awareness during Anaesthesia**

Sir,—In this day and age of light anaesthesia, any reminder that the patient receiving a general anaesthetic expects to be unaware of the surgical procedure, and have no recollection of it, is welcome. However, perhaps the picture is not so gloomy as Drs. J. Wilson and D. J. Turner (1 February, p. 280) suggest.

A reported study described 20 consecutive cases of urticaria treated with atropine 0.4 mg., thio-panone 1.0-2.0 mg./l. bodyweight, nicotine oxide 3.5-5.0 mg./min., and oxygen 1.5-2.0 L/min. into a semi-closed circle absorber system, relaxants, and artificial ventilation in 50-150% of the volume of the Radford Nomogram value. Words of established emotional significance, in the form of a story, were tape-recorded and repetitively applied to the patients through in- putting earphones at times varying from 10-90 minutes after the induction of anaesthesia. On the second or third postoperative day patients were visited by an experienced interviewer, who was unaware of the details of the study. The interview was designed to annotate a pre-designed protocol. No evidence indicating recall of auditory stimuli could be obtained, nor did any patients provide evidence of distress.

The difference between these results and those recently reported in your journal may be explained by differences in experimental method and by the environment of the patients. Important factors in any consideration of awareness and recall associated with surgery are the sounds available to the patients, their interpretation of them, and the significance of that interpretation to the patients. As the authors indicate, if patients are anaesthetized the problem doesn’t arise. However, if the surgical situation demands particularly light anaesthesia, perhaps partial isolation of the patient from auditory stimuli is of value during the operative period. Also, it is possible that the appropriate auditory stimuli provided by good nursing care immediately the patients are even dimly aware of their environment may have a modifying effect on their overall impression of the surgical experience.—I am, etc.,

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**Ampicillin and Urticaria**

Sir,—I read with interest the papers dealing with adverse reactions to drugs in your issue of 1 March (p. 527), and, in particular, that by Dr. J. Tattersall and Professor O. L. Wedge (p. 531). In their summary the authors suggest that "larger surveys of adverse reactions in relation to drug usage may be able to make a considerable contribution to the problem." In common with most other pharmaceutical manufacturers, we maintain extensive coverage of the international medical and allied scientific literature on all drugs, including a library of adverse reactions and side-effects. I feel, therefore, that it may be of general interest to present our findings with ampicillin, which was reported by Dr. Hurwitz and Professor Wade as having produced multiple maculopapular pruritic rashes in 103 patients treated, an incidence of 7.8%.

Our most recent figures show that a total of 13,638 patients treated with ampicillin have been reported in the published medical literature. Of these, 383 (2.8%) experienced skin reactions of various kinds. The description and incidence of rashes varies from observer to observer, and careful observation of the patient and post-treatment follow-up tends to produce a higher reported incidence. Of the rashes recorded in the literature 58 were described as urticarial, 23 as maculopapular, and 114 as maculopapular (including the so-called "morbilliform" type). The incidence of rash is most often described in terms of other rash types, and 169 skin reactions were of an unspecified nature.

The rashes reported during ampicillin therapy fell into two broad categories—that is, urticarial or maculopapular reactions resembling the skin reactions of other common clinical conditions. The majority of the urticarial rashes are apparently ampicillin-specific and do not indicate true penicillin hypersensitivity. They are commonly described as a faint erythema, often with a centrifugal distribution. They are usually transient and of short duration, and are not usually associated with more serious conditions such as anaphylaxis or true penicillin hypersensitivity. The maculopapular rashes are of longer duration, and are often described as "morbilliform" and are associated with the development of a maculopapular rash in the skin. These rashes are more often seen in patients who have been treated with ampicillin, and in some patients it may even disappear without discontinuation of the drug. In a few cases, however, it becomes a generalized severe erythema, sometimes with slight fever. Although the rash may arise during the course of therapy, sometimes it develops as late as five days after the end of treatment. In a few cases the rash may persist for several weeks. Subsequent courses of the antibiotic may not completely reproduce the reaction. In a limited number of patients with this type of rash investigated so far we have been unable to demonstrate circulating antigenic antibodies in the serum. It is now well established that...