Pitocin in Obstetrics

SIR,—With due respect to Dr. G. W. Theobald, the originator of the "pitocin" drip technique, I must reply to his rather severe criticism (*Journal*, August 14, p. 413) regarding the dosage of pitocin used in my unfortunate case of cardiac arrest under light cyclopropane anaesthetic with pitocin drip (*Journal*, July 10, p. 79).

Thirty units of pitocin were injected into about 900 ml. normal saline to make the uterus contract quickly—that is, within five minutes. The rate of the drip was about 30 drops per minute, and after adding the pitocin it ran for slightly less than two minutes before it was stopped because of the condition of the patient. In these two minutes she could barely have received 0.25 of a unit of pitocin. Five units of pitocin are frequently given either intramuscularly or intravenously for post-partum haemorrhage, without any reported fatalities, but these cases are usually either fairly deeply anaesthetized or wide awake. Such a small dose of pitocin administered in my case could hardly be the main cause for the fatal cardiac arrest.

I would add that, after some years of experiment with various dosages of pitocin in the drip, we concluded that 30 units per litre was the optimum concentration to initiate uterine contractions quickly. The rate of administration was usually 15 drops per minute. This concentration was used in about 200 inductions, and very rarely did we see uterine spasm and never a maternal death.—I am, etc.,

London, S.E.5. MARTIN LESSER.

A Plastic Surgical Dressing

SIR,—On my return from abroad, I read with interest the report on the use of a solution of acrylic resin in solvents by Messrs. C. G. Rob and H. H. Eastcott at the surgical unit of St. Mary's Hospital (*Journal*, July 3 p. 17). The application is not novel, nor can the product compare in surgical value with "portex," which has been used for the same purpose for many years.

Portex is a combination of acrylic resin with phenyl salicylate, resorcin and eugenol, also insolvents, and is ten times as adhesive, elastic, vasoconstrictive, and analgesic as the pure resin alone. Its use as a surgical barrier and dressing was investigated by Mr. H. W. S. Wright and fully reported in the *Lancet*[1] after 300 operations, and many thousands of surgeons who have used the product will support his findings. The use of a solution of acrylic resin which is not even germicidal is a retrograde step rather than an advance in medical science, and calls for comment.—I am, etc.,

Hythe. S. A. LEADER.

REFERENCE

1 *Lancet*, 1944, **1**, 664.

Negative-pressure Drainage in Radical Mastectomy

SIR,—I read Mr. G. F. Cassie's account of the above with interest (*Journal*, August 21, p. 452). I have used a somewhat similar method for the past three years, and can confirm all the advantages claimed for the method. Instead of negative-pressure drainage, however, I have used continuous suction, the tube being connected to the usual three-bottle suction apparatus, which we use for gastro-intestinal suction. This gives excellent results, and is continued for six days. At the completion of the operation the drainage tube is stitched to the skin to give an airtight function, and then all the air is very easily removed from beneath the flaps by applying the sucker to the tube. The flaps immediately sit tight on the chest wall, and the most dramatic part is the way the skin clings to the axillary vault, which is most important for early and sound healing. The tube is then clipped off free attached to the sucker apparatus on return to the ward. The method has without doubt removed many of the unpleasant features during the convalescence after radical mastectomy.—I am, etc.,

London, S.E.13. JAMES JEMSON.

Persistence of Actinomycosis

SIR,—Actinomycosis of the abdomen is a comparatively rare and, until recently, a fatal disease. Armitage and Smith, however, in their recent review[1] have shown that with modern chemotherapy the prognosis has greatly changed for the better and survivals may now be expected. But the tendency for infection by actinomyces to persist, though perhaps in a quiescent condition, should be kept in mind when assessing prognosis or describing a case as "cured." A recent patient of ours has again brought the importance of this feature to notice.

A man of 26, following the removal of his appendix and drainage of an appendix abscess on June 4, 1952, developed a subphrenic abscess which contained *Streptothrix actinomyces*. He made a good recovery after drainage of his subphrenic abscess on June 30, 1952, and exhibition of aureomycin, as we reported elsewhere.[2] An abscess developed in the appendicectomy scar and ruptured spontaneously on March 1, 1953. At operation on May 15, 1954, for a ventral hernia which had developed in the appendicectomy scar, Mr. W. P. Small found a small abscess undetected clinically in the muscles at the medial end of the wound. From this abscess, as from the previous ones, Dr. Helen A. Wright, of the Bacteriological Service, Edinburgh University, isolated Gram-positive filamentous branching organisms typical of an actinomyces. Following the operation for repair of the incisional hernia, the patient was given aureomycin, 1 g. daily in 250-mg. doses six-hourly for seven days. He made an uninterrupted recovery and now has a sound abdominal wall. He has been in excellent health since March, 1953, performing his full duties as a post-office sorter, lifting and carrying heavy mailbags. This repeated straining, in fact, led to the development of the hernia in his weak appendicectomy scar, necessitating repair. The opportunity was thus afforded for checking up on the site of the old infection, with the result described.

The streptothrix has not given rise to any trouble in this case for over a year, and the finding of a small abscess in the abdominal wall was, in fact, a surprise. But the fact that an actinomyces has been isolated again shows that though modern chemotherapeutic agents, in this case aureomycin, undoubtedly saved the patient's life and restored him to good health, the actinomyces still persists and may perhaps in a subsequent period of lowered resistance again give rise to trouble. A careful follow-up in these cases, and the co-operation of the bacteriologist, is essential.—We are, etc.,

Edinburgh. JAMES A. ROSS.
IAN C. S. KNIGHT.

REFERENCES

1 *Brit. J. Surg.*, 1954, **42**, 77.
2 *Edinb. med. J.*, 1954, **61**, 170.

Normal Cerebrospinal Fluid Sugar in Tuberculous Meningitis

SIR,—The concentration of sugar in the cerebrospinal fluid is now considered to be far more important than that of chloride as an aid to the diagnosis of tuberculous meningitis. Indeed, most authorities think that it is of paramount importance in the differentiation of this disease from poliomyelitis and other lymphocytic meningitides. A recent case, however, has shown that the sugar concentration can be normal when there is convincing evidence of active tuberculous infection being present. The cerebrospinal fluid findings on three occasions are shown in the table.

	June 21, 1954 (First Specimen)	June 22, 1954	June 25, 1954
Leucocytes total/c.mm.	132	184	253
Polymorphs/c.mm. ..	78	19	61
Lymphocytes/c.mm. ..	52	165	192
Macrophages/c.mm. ..	2		
Protein mg./100 ml. ..	65	75	75
Globulin ..	Slight increase	Slight increase	Slight increase
Chloride mg./100 ml. ..	632	602	554
Sugar mg./100 ml. ..	51	64	64
Z.N. film	No acid-alcohol-fast bacilli	One a.a.f.b. seen	Scanty a.a.f.b. seen
Culture for *Myco. tuberculosis*	Positive	Positive	Positive