strange. Patients who had received central nervous system stimulants or depressants other than the analgesic under study either before or after the operation were excluded.

There were 114 patients of whom 31 had auditory or visual hallucinations, distributed as shown in the table.

	Morphine	Pentazocine	Total
No. of patients . . .	49	65	114
Patients experiencing hallucinations . . .	7	24	31
Hallucinations pleasant . . .	2	0	2
Hallucinations unpleasant . . .	2	12	14
Neither pleasant nor unpleasant . . .	3	12	15

These figures suggest that hallucinations after surgery occur more often in association with pentazocine than with morphine ($\chi^2 = 6.133$; $P < 0.05$) but we think it is important to appreciate that the problem is not exclusive to pentazocine.—We are, etc.,

J. I. ALEXANDER

United Bristol Hospitals,
Bristol

ALASTAIR A. SPENCE

Western Infirmary,
Glasgow

Haemophilus Influenzae

SIR,—In a recent American case-report and review of the literature on *Haemophilus influenzae* cellulitis, published in a British journal, Rasmussen¹ stated that this syndrome had not been reported in the European literature. In fact, one case had been mentioned in a paper from Oxford about haemophilus epiglottitis.² In the light of Rasmussen's comments we wish to report two further cases of *H. influenzae* type b infection recognized in Oxford in the past few weeks.

The first patient, an 11-month-old boy, was admitted to the Nuffield Orthopaedic Centre on 4 February with an 18-hour history of irritability and a tender swelling of the right calf. Findings on admission included: temperature 38.5°C; pulse rate 130/min; W.B.C. 38,000/mm³ with marked neutrophil leucocytosis; and E.S.R. (Westergren) 90 mm in 1 hr. His right upper calf was swollen (1.25 cm greater in diameter than the left) and evident cellulitis extended upwards behind the right knee, though without any detectable joint effusion or limitation of movement. There was shotty enlargement of his right inguinal lymph nodes. He was treated with oral cloxacillin and ampicillin and was discharged from hospital after five days. Meanwhile two blood samples taken at the time of his admission had given pure cultures of a type b strain of *H. influenzae*. No bacteriological investigation of the leg lesion had been attempted.

The second patient, a 9-month-old boy, was admitted to the Oxford Eye Hospital on 28 February with a 12-hour history of swelling of his left eyelids and surrounding tissues. On admission he was febrile and generally unwell. He had marked swelling of his lids and periorbital tissues on the left side and a pseudomembranous conjunctivitis of the left eye, which was discharging pus and blood-stained watery fluid. He was thought possibly to have some orbital cellulitis. He was treated with gentamicin eye-drops for the first 24 hours and improved markedly, but after that his treatment was changed to chloramphenicol eye-drops and oral ampicillin. This was because culture of the purulent discharge had produced a light growth of *H. influenzae* type b and because his fever suggested the need for systemic antibiotic treatment. He made a rapid recovery and was sent home after four days. We cannot say with certainty that this was a case of cellulitis as his marked periorbital swelling may have been entirely due to oedema secondary to a severe conjunctivitis.

The lack of references to haemophilus cellulitis in the European literature is prob-

ably due to infrequent recognition rather than to infrequent occurrence. Significantly Rasmussen (private communication) has seen several more cases since reporting his first. A similar connexion between awareness and reported incidence is clearly apparent for haemophilus epiglottitis.² The aetiology of the first case described here would never have been known if blood cultures had not been set up. As for our second case, the mere finding of a light growth of *H. influenzae* might have been equivocal, as it could have been due to contamination with one of the non-capsulated strains commonly present in the upper respiratory tract. Capsulated strains are far less common, and strains of capsular type b can be far more virulent. Clear recognition of the aetiology therefore depended on typing of the isolated haemophili. In this connexion we would stress the value of first demonstrating iridescence of colonies on Levinthal's or other suitable transparent agar, since non-iridescent (that is, non-capsulated) strains may give confusing reactions in agglutination tests with capsular-typing sera. It is also important to use reliable sera. We used those made by Hyland Laboratories, which we have always found reliable in agglutination and capsule-swelling tests. Batches of commercially available *H. influenzae* typing sera from another source, however, have given unsatisfactory results in our hands, and in particular have failed to detect known type b strains.

We are grateful to Mr. J. Spivey and Mr. A. Bron for permission to describe patients admitted under their care.

—We are, etc.,

K. CARTWRIGHT
D. C. TURK

Bacteriology Laboratories,
Churchill Hospital and Radcliffe Infirmary,
Oxford

¹ Rasmussen, J., *British Journal of Dermatology*, 1973, 88, 547.

² Addy, M. G., Ellis, P. D. M., and Turk, D. C., *British Medical Journal*, 1972, 1, 40.

Platform Shoe Syndrome

SIR,—I have seen a considerable number of young women with painful knees recently, some with effusions and all with tenderness over the patellar ligament. This development has paralleled the wearing of thick-soled, high-heeled, so-called "platform" shoes.

It is easy to see why, if one watches these girls walking. The knee is always flexed and the weight is thrown on to the anterior ligaments of the knee joint. Treatment is removal of the cause by insistence on the wearing of more sensible shoes.—I am, etc.,

MICHAEL WHITEHOUSE

Camberley, Surrey

Cannulation of Internal Jugular Vein

SIR,—It would be unfortunate if the report of extensive neurological damage after cannulation of the internal jugular vein by Dr. C. E. Briscoe and others (23 February, p. 314) caused serious concern about the safety of this technique. This case report implies that strong solutions of alkali (8.4%) and calcium chloride (20%) were injected more or less directly into the

tissues of the neck. It is hardly surprising that severe tissue damage was found. In our large experience¹ of internal jugular vein cannulation no such incident has occurred in about 2,000 cases.

We think it worth while to stress the following points: (1) It is not merely advisable but imperative that a cannula is used which is at least 15-20 mm long. This will make dislodgement unlikely and ensure that a true central venous pressure is recorded. (2) It is advisable to use the right internal jugular vein when at all possible as it provides a straight "run" to the superior vena cava and avoids the possibility of damage to the thoracic duct. Insertion into the right side of the neck is also more easily accomplished by right-handed operators. (3) In any case where difficulty is either anticipated (hypovolaemia) or encountered the use of a guide wire (Seldinger) technique should be strongly encouraged.—We are, etc.,

B. S. JENKINS
ANTHONY CLEMENT
J. A. BELL
R. D. BRADLEY

Intensive Therapy Unit,
St. Thomas's Hospital,
London S.E.1

¹ Bell, J. A., Bradley, R. D., and Jenkins, B. S., *Lancet*, 1973, 1, 105.

Turner's and Noonan's Syndromes

SIR,—As one who is studying these syndromes at this institute I welcome your timely leading article (16 March, p. 470). However, I was disappointed to see that there was no reference to the otological component which is obviously an integral part of these syndromes. There is no doubt that many of these patients have an otological abnormality and our findings are in accordance with other published series. This commonly takes the form of a sensorineural hearing loss, though other types of impairment are occasionally found.¹

My colleagues and I are preparing for publication the temporal bone findings in a 47-year-old woman with Turner's syndrome who died after craniotomy for an inoperable cerebral tumour. She had been deaf since early childhood and hearing tests revealed a long-standing sensorineural loss. These findings are to be published in full elsewhere.

If clinicians concerned with the care of patients with Turner's and Noonan's syndrome would like to refer them to us we would be pleased to carry out a complete otological and vestibular examination. In addition we would be interested in examining further temporal bones from patients with these and other chromosomal abnormalities.—I am, etc.,

GEORGE BUCHANAN

Institute of Laryngology and Otology,
Gray's Inn Road,
London W.C.1

¹Anderson, H., et al., *Acta Oto-Laryngologica*, 1969, Suppl. no. 247.

Primary Defect in Hepatolenticular Degeneration

SIR,—I find remarkable the passage in your leading article on abiotrophies (2 March, p. 337) which refers to hepatolenticular de-