

the stomach, and secondly by testing a small quantity of aspirate with litmus. The proximal end of the tube was taped over the bridge of the patient's nose and forehead, out of her line of vision, and connected via a giving set to an infusion bottle.

Isocal (a polymeric, isotonic nutrient solution) was administered as a continuous infusion, initially at a rate of 60 ml/hr. This was increased over the next 24 hours to 120 ml/hr and was well tolerated. In this way the patient received over 2,000 ml fluid and 2,000 calories per day. At no time did the patient object to the tube, and in fact she seemed oblivious to its presence. During the course of naso-gastric feeding the patient was offered food at regular mealtimes, and after two days began to swallow fluids and solids apparently uninhibited by the presence of the tube. After six days her voluntary intake was sufficient to permit removal of the naso-gastric tube; her weight had increased from 54.8 kg to 59.7 kg. During this time vigorous attempts had been made to treat her depressive state, with daily ECT and high doses of loxapine, clomipramine, and chlorpromazine. A marked temporary improvement occurred within the first three days, though the loxapine had then to be reduced in dose because of the onset of an acute oro-buccal dyskinesia which disappeared on dosage reduction.

During the succeeding few weeks the patient continued to maintain her calorie and fluid intake, though her depressive state is as yet by no means cured. The whole management was well within the capacity of the nursing staff on our psychiatric ward.

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#### DO NEUROLEPTICS INCREASE THE RISK OF CHOKING?

DEAR SIR,

We noticed that deaths by asphyxia due to obstruction of the upper airways by food, at the Hospital Psiquiatrico Juqueri in Franco da Rocha, São Paulo, had increased in recent years. No obvious cause was found in individual cases, and we tried to test whether the change was related to the use of neuroleptic drugs.

We collected 8,490 autopsy reports from 1928 to 1978 and found the number of cases of asphyxia due to obstruction of the upper airways by food to have increased from the early 1950's when neuroleptic drugs were introduced to the hospital. The average

number of these deaths before and after the introduction of neuroleptic drugs has been expressed as a proportion of the number of patients in the hospital with the result that in 1928-1953 0.07 per cent of deaths were from this cause and in 1953-1978 0.43 per cent, a proportion six times greater.

There was no predominance of either sex, or of diagnosis, or of other forms of physical treatment such as ECT or insulin. We wonder whether the deaths in the period of neuroleptic treatment are caused by the way the drugs affect the mechanism of swallowing, as witness the widespread oro-facial neurological side effects of the drugs and the dysphagia which can be caused by overdosage.

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#### CEREBRAL LATERALIZATION AND UNILATERAL ECT

DEAR SIR,

G. S. Allen, in his letter (*Journal*, March 1980, 136, 316) presents the work of Levy and Reid as a method of identifying the cerebral hemisphere responsible for speech. However, recent work by McKeever and Van Deventer casts doubt on Levy's hypothesis that left-handers who use an inverted handwriting posture are left-dominant for language. In their study they tested the relationships between inverted and non-inverted styles of writing and dichotic and lateralized tachistoscopic indices of hemispheric language specialization in left-handers. According to their results they found no difference in the degree of left hemisphere language dominance for the two writing-style groups. They also found a significant sex difference in that males used the inverted writing position more than females. It would therefore appear that the observation of a person's pen grip as an indicator of the hemisphere to which unilateral ECT is to be applied is not clinically a reliable test.

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#### Reference

- McKEEVER, W. F. & VAN DEVENTER, A. D. (1980) Inverted handwriting position, language laterality and the Levy-Nagylaki genetic model of handedness and cerebral organization. *Neuropsychologia*, 18, 99-102.