has been accepted for publication, and our findings support those of Dr Bardhan and others that midazolam may prove to be the drug of choice for endoscopy.⁷ The benefits, however, can all be lost by giving too large a dose.

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² Collier P, Kavar P, Gamble JAS, Dundee JW. Influence of age on pharmacokinetics of midazolam. *Br J Clin Pharmacol* 1982;13:602P.

³ Klotz U, Reimann I. Delayed clearance of diazepam due to cimetidine. *N Engl J Med* 1980;302:1012-4.

⁴ Fee JPH, Dundee JW, Collier PS, McClean E. Diazepam disposition following cimetidine or ranitidine. *Br J Clin Pharmacol* 1984;17:617P-8P.

⁵ McGimpsey JG, Kavar P, Gamble JAS, Browne ES, Dundee JW. Midazolam in dentistry. *Br Dent J* 1983;155:47.

⁶ Brophy T O'R, Dundee JW, Heazlewood V, Kavar P, Varghese A, Ward M. Midazolam, a water-soluble benzodiazepine for gastroscopy. *Anaesth Intensive Care* 1982;10:344.

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Manufacturers should provide adhesive labels with batches of anaesthetic drugs

SIR,—Anaesthetists have used printed adhesive labels to identify syringe contents for several years, but the present system has disadvantages. Many labels are needed in several locations, and labels for new drugs are not immediately available unless one writes on blank tape. These problems would be solved if manufacturers enclosed printed adhesive syringe labels in each box of ampoules. This would allow syringes to be labelled wherever injections are given. Labels should bear the approved name and the dilution of the drug. Anaesthetists and others who would welcome this facility might tell pharmaceutical houses.

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Warts and cervical cancer

SIR,—Dr Albert Singer and others connect human papillomavirus infection with cancer of the female genital tract (10 March, p 735). They prompt us to report our own experience.

We have studied patients who had been treated for common warts of the hands and feet and for condylomata acuminata of the external genitalia between 1973 and 1983. Four hundred women were invited to our department to be investigated for epithelial

TABLE II—Results of cytological examination in women who had had condylomata acuminata of the external genitalia

Age group	Total No of patients	Degree of dysplasia			
		Grade I	Grade II	Grade III	Grade IV
20-30	27	1	13	13	0
30-40	10	2	4	4	0
40-50	10	2	1	4	3
50-60	3	1	1	1	0
60-70	15	4	7	3	1
Total	65	10	26	25	4

abnormalities of the cervix, and 107 women who had had warts and 65 who had had condylomata responded. The results are summarised in the tables. A total of 4% of women who had had warts and 6% of those who had had condylomata proved to have atypical dysplasia of the cervical cells. A mean of eight months elapsed between the treatment of warts and the cytological findings.

Though lower than the 30% reported by Walker *et al* for young women with vulvar warts,¹ our prevalence of dysplasia is higher than expected in the population of our area for classes IV and V (0.2%). Our data strongly support the idea that one or more human papillomavirus subtypes are implicated in the pathogenesis of malignant lesions of the cervix and that women with warts are a population at high risk.

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¹ Walker P, Singer A, Dyson J, Oriel D. The natural history of cervical epithelial abnormalities in patients with vulvar warts. *J Vener Dis* 1983;59:327-9.

² Ballerini D, De Piro W, Nadin C. Confronto tra esami citologici cervicali dubbi e positivi per neoplasia e corrispettivi esami istologici eseguiti nel periodo 1970-1980 presso l'Ospedale di Savona. *Patologica* 1981;73:793-803.

Child consultation patterns in general practice

SIR,—The study by Dr Peter D Campion and Mrs Jennet Gabriel (12 May, p 1426) appears to confirm the findings of the annual General Household Survey. The 1981 survey shows that the consultations per person per year for the 0-4 age group for males and females were 6.7 and 5.5 (Dr Campion and Mrs Gabriel report 6.8 for the whole 0-2 age group) and for 5-15 year old male and females 2.5 and 2.7 (Dr Campion and Mrs Gabriel report 2.2).

The social class characteristics of people presenting to GPs are also available in the General Household Survey. In 1981 social class I consultations (all ages) per year were 2.7 compared with 3.5 for the lowest social class (unskilled manual). For the age group 0-4 these data show five consultations per year for children of employees and managers and 10 consultations per year for the children of semiskilled manual workers. The social class gradient is much less after this age.

Careful reading of the General Household Survey data refutes one remark of Dr Campion and Mrs Gabriel. They note that consultation rates for children in general practice are higher than for other age groups (apart from very old people). Whether we define the very old as 65-74 or 75 plus, this remark is not validated by the General Household Survey

data. In 1981 the consultation rates per person per year in the 65-74 year group were 3.9 and 5.8 for men and 4.6 and 6.0 for women.

Furthermore, these data appear to show over the past 10 years fluctuating but perhaps marginally declining rates of consultation by the elderly. Is this trend correct? Is its cause the greater fitness of the elderly? How much will this reduce the "burden" of the elderly on the NHS during the trials imposed by public expenditure constraints in the next 10 years?

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Urinary dopa metabolites

SIR,—Dr B K Sharma and others state that the detection of urinary dopa metabolites should be used more often in investigating obscure abdominal masses (14 April, p 1111). We describe a patient with an obscure abdominal mass in whom measurement of urinary dopa metabolites was misleading.

A 65 year old lady presented with a two month history of right sided tremor. The signs of mild Parkinson's disease were detected, but she also had a smooth, non-pulsatile epigastric mass. She had no abdominal symptoms and there was no relevant past or family history. She was taking no drugs. She was started on orphenadrine (50 mg three times daily) and two weeks later Sinemet 110 (levodopa and carbidopa) one four times daily was added.

Routine biochemical tests showed only a slightly raised alkaline phosphatase. Imaging techniques showed a homogenous mass in the left lobe of the liver with no evidence of a neoplasm elsewhere. Hepatic arteriography showed a tumour circulation. Serum concentration of α fetoprotein was normal. A percutaneous biopsy specimen of the mass suggested a clear cell tumour, while a sample of the right lobe of the liver was normal. Urinary excretion over 24 hours of 5 hydroxy-indoleacetic acid was normal, but on four occasions urinary 4-hydroxy-3-methoxymandelic acid excretion was raised to between 65 and 100 μ mol in 24 hours (normal range less than 35 μ mol). Total 24 hour urinary metadrenalines and normetadrenalines, plasma adrenaline and noradrenaline, and a ¹³¹I-metiodobenzylguanidine scan were normal.

At laparotomy no other abnormality was found and a left hepatic lobectomy was performed. Histology of the tumour suggested the fibrolamellar variant of hepatocellular carcinoma with abundant eosinophil and clear cells arranged in lobules surrounded by fibrous connective tissue bands.¹ One year later the patient is well and tumour free.

In this patient the raised urinary 4-hydroxy-3-methoxymandelic acid was misleading since we found no evidence of a catecholamine producing tumour. Sinemet may interfere with the detection of 4-hydroxy-3-methoxymandelic acid by the Pisano technique, but to our knowledge this has not previously been reported. An asymptomatic fibrolamellar hepatoma is usually associated with a young age group, a normal α fetoprotein, a 50% chance of successful resection, and a relatively good prognosis.¹ Serum vitamin B₁₂ concentration and binding capacity are usually raised.² Our patient is to our knowledge the

TABLE I—Results of cervical cytological examinations in women who had had warts of the hands or feet

Age group	Total No of patients	Degree of dysplasia			
		Grade I	Grade II	Grade III	Grade IV
20-30	26	6	19	1	0
30-40	12	4	7	1	0
40-50	18	5	7	3	3
50-60	14	2	8	3	1
60-70	29	8	16	5	0
Total	99	25	57	13	4