could be evaluated as even better. As the possibility for iatrogenic damage after intra-articular cortisone injections has been reported²⁻⁶ to be higher than was observed after intra-articular or especially intramuscular glycosaminoglycan polysulphate therapy it seems justified to suggest this treatment in cases of painful knee joints after sports trauma and strenuous exercise.

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⁵ Steinberg, C., et al., *Journal of the American Medical Association*, 1962, **181**, 851.
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Septic abortion and IUCDs

SIR,—We were interested in the comments of both Dr E S B Wilson and Mr W G Mills (18 March, p 719) on our report of septic abortion and septicæmia in a Gravigard (Copper-7) user (25 February, p 481). In reply to Dr Wilson we agree that culture of a high vaginal swab (HVS) is unsatisfactory in diagnosing the bacteriological cause of pelvic inflammatory disease (PID) and indeed one of us has previously drawn attention to this point.¹ However, in our report we were referring to the intrauterine infection of products of conception and, while an intracervical or intrauterine sample may have been preferable, a HVS gives a picture of the bacterial flora of the upper vagina from which the infecting agent will have ascended into the uterus.

Dr Wilson has obtained pure cultures of bacteria from intrauterine contraceptive devices (IUCDs) removed from patients with signs and symptoms of pelvic infection. However, PID is difficult to diagnose without laparoscopy² and doubt must therefore exist as to whether these cultures necessarily represent bacteria causing tubal infection. Although contamination by vaginal organisms can be avoided by careful removal, it is impossible to avoid contaminating the IUCD with cervical mucus during its passage through the cervical canal and the cultures may merely represent the normal flora of the lower canal.

We cannot offer Mr Mills any further information on the time interval since insertion or on the length of the tail. However, although with other devices excessive length of tail is unlikely to be the explanation for its continued presence in the vagina at 16 weeks' gestation, the Gravigard is a special case. It differs from other current devices in that as supplied by the manufacturers the tail forms a loop alongside the device predisposing to several problems after insertion.³ If the Gravigard is fitted with the loop of tail left in the uterus, as is now recommended, the total length of tail is greater than that of other devices. As the uterus enlarges during pregnancy this slack may need to be taken up before the vaginal end

of the tail is pulled into the cavity. Once the tail has disappeared the bridge between the sterile uterus and the vagina with its organisms has been broken. Our reason for cutting the tail flush with the external os if the device cannot be removed is to reduce the time that it is in contact with the vagina.

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Problems with IUCD tails

SIR,—Further to my letter (19 November, p 1351) and that of Mr Geoffrey Chamberlain (28 January, p 237), I should like to describe another problem with IUCD tails, which may be previously unreported.

A 32-year-old multiparous patient was seen for a routine IUCD check and the tail of the Lippes loop, which had been fitted six years previously, was protruding not from the external cervical os but from the vaginal surface of the upper lip of the cervix 7.5 mm from the os. The cervix was healthy with squamous epithelium up to the os—that is, there was no columnar epithelium outside the canal forming an "erosion." Presumably an erosion had previously been present and during the replacement of the columnar epithelium by squamous epithelium the metaplastic squamous epithelium had grown over the tail incorporating it into the cervix. The device was removed by pulling on the tail, which easily cut through the epithelium covering it. This complication is presumably less likely to occur with copper devices, which are routinely replaced every few years.

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Amniocentesis for the 35s and over

SIR,—There is currently uncertainty about the selection of pregnant women who should be offered amniocentesis. Galjaard¹ has stated that "some centres, as in Scandinavia, accept all women over 35, others take 40 as the limit and most groups, including our own, consider the age of 38 and older as an indication for amniocentesis."

The findings from 599 amniocentesis specimens received in the department of pathology from patients aged 35 years and over are shown in the table. These include 17 patients aged 35-39 and 11 patients aged 40 or more who had had a previous child with a chromosomal abnormality. There were also 23 patients aged 35-39 and five patients aged

40 or more who had a family history of neural tube defect. The prevalence of chromosomal abnormalities in mothers over 40 years was 6.15%. However, in mothers aged 35-39 there was a relatively high prevalence of abnormalities (1.98%), much higher than that cited, for instance, by Philip *et al*² (0.2%), which has already been commented upon.³ We have diagnosed only one trisomy 21 where there has been a previously affected sibling.

Trisomy 21 was the most common abnormality in our series and it is of note that most of the cost-benefit analyses reviewed by Mikkelsen *et al*⁴ were based on the prevalence of this syndrome. It has already been observed that there is a discrepancy between the prevalence of this syndrome as detected on amniocentesis and its estimated prevalence in a liveborn population.^{5,6} This may ultimately be explained following post-mortem chromosomal surveys of late abortions and stillbirths. Nevertheless, it would be unwise to allow this discrepancy to influence our judgment regarding the cost benefit of amniocentesis in women at different maternal ages. We consider that our results highlight the necessity for more widespread application of amniocentesis in the 35 and over age group. However, the ultimate decision should rest with the parents and the availability of clinical and laboratory expertise.

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- ¹ Galjaard, H., in *Towards the Prevention of Fetal Malformation*, ed J B Scrimgeour. Edinburgh, University Press, 1978.
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³ Steven, J. D., and Scrimgeour, J. B., *British Medical Journal*, 1978, **1**, 301.
⁴ Mikkelsen, M., Nielsen, G., and Rasmussen, E., in *Towards the Prevention of Fetal Malformation*, ed J B Scrimgeour. Edinburgh, University Press, 1978.
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⁶ Bain, A. D., *et al*, *Lancet*, 1976, **2**, 375.

Why blame the pill?

SIR,—I note with concern that deaths from thrombosis occurring in young and middle-aged women who are on the contraceptive pill are being increasingly reported to the coroner and verdicts of accidental death are being returned. As there is no pathological feature to distinguish these cases from other cases of thrombosis not associated with this drug it would appear that these verdicts are based on the slight statistical increase in deaths from these causes noted in the various surveys of the contraceptive pill. I am surprised, therefore, not to have read of any deaths from bronchogenic carcinoma being the subject of an inquest in view of the fact that the link between

Chromosomal abnormalities in 599 amniocentesis specimens from patients aged 35 and over

Maternal age (years)	Total analysed 1975-7	Chromosome abnormality			Totals	Percentage abnormal
		Trisomy 21	Trisomy 18	Other*		
35-39	404	4	2	2	8	1.98
≥40	195	7	3	2	12	6.15
Totals	599	11	5	4	20	3.34

*These were: for age 35-39 : 47,XY,+mar; 47,XXX
for age ≥40 : 46,XX/47,XX,+r(mar); 45,X

cigarette smoking and bronchogenic carcinoma is also statistical but of an infinitely greater probability.

That this is not a matter of mere legal sophistry will be confirmed by most general practitioners, who are dealing with increasing frequency with features of anxiety and guilt in women on the pill (and their husbands) produced by the prominence given to these cases by the press. I suggest that requiring a much higher degree of proof linking the pill directly with the cause of death in each individual case would both serve the ends of justice and ensure the peace of mind of many of our patients who are much less at risk from the pill than from smoking cigarettes.

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Self-mutilation in severely retarded children

SIR,—May I point out to Minerva (25 March, p 794) that many of the self-mutilating severely retarded children on whom she reports are possibly psychotic rather than simply stimulus seeking. Some may, indeed, be in a chronic state of hyperarousal so that supernormal stimuli may only serve to irritate them further. The attention-seeking cliché is so overdone in the mentally handicapped field as to have lost explanatory power.

It is well known that the diagnosis of mental illness is often exceedingly difficult in a setting of subnormality as the patient usually presents merely with persistent, non-specific behavioural upset. All mentally handicapped children should be given the chance of drug treatment (with phenothiazines, lithium, amphetamine, etc) if they show bizarre or troublesome behaviour, whether continuous or phasic. Otherwise any underlying mental illness may interfere with the learning process so that their other handicaps are compounded by educational backwardness as well.

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Oesophageal bolus extraction by balloon catheter

SIR,—The technique described by Mr Peter A Jones (1 April, p 819) seems a useful therapeutic trick for the relief of oesophageal bolus obstruction when skilled help is not immediately available. I would, however, take issue with his statement that if this technique fails rigid oesophagoscopy under general anaesthesia is indicated. If the fiberoptic endoscope is used bolus extraction can easily be done under local anaesthesia and sedation. This also allows immediate biopsy and dilatation of any stricture present using Eder-Puestow dilators. This should be regarded as the procedure of choice if the instruments are available.

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SIR,—May I add a comment to the laudable article "Oesophageal bolus extraction by balloon catheter" (1 April, p 819) by Mr P A Jones?

Sometimes it is advisable to screen the removal of the foreign body with an image intensifier, and so to put Hypaque or a similar contrast medium into the balloon of the Foley catheter instead of air. Anyway, a fluid is better than air, because it is non-compressible. A catheter smaller than 26 F can be inserted more easily and I would recommend filling the balloon with 20 ml rather than the 8 ml suggested by the author.

This method is suitable for removing soft or rounded objects—for example, meat and coins—but it is not advisable for hard, irregular objects—these should be removed via oesophagoscopy. A point to be noted is that some modern dental plates do not contain any radiopaque material (as this material weakens them), so may not be visible on plain x-ray. As with any radiotranslucent object suspected of obstructing the oesophagus, give a dilute barium swallow, or a cotton wool ball soaked in barium. Even if the cotton wool passes the object, it will leave a few strands stuck to it. Before using this balloon catheter technique, it is safer to make efforts to locate and identify the obstruction.

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Schumann's hand injury

SIR,—In their recent article on Schumann's hand injury (8 April, p 900), Dr R A Henson and Professor H Urich have suggested that Robert Schumann's "hand disability" may have been due to "damage to the posterior interosseous nerve . . . for the clinical picture is more in accord with a lesion here than at any other point in the nervous system." Yet they have not been able to find a single report of posterior interosseous palsy occurring in the really enormous body of professional pianists, and they also express their own reservation about such a diagnosis.

I remember, as a medical student, attending one of the late Mr A Dickson Wright's outpatient clinics at St Mary's—it must have been in 1940 or 1941—when one of my colleagues, a keen amateur fiddler, sought his advice about difficulties he was having (with his left hand) in playing rapid passages. Whereupon "Dicky" expressed the view that his problem was probably due to the same anatomical limitation as Schumann had experienced with his right hand (which is responsible for most of the "velocity" in piano playing), a limitation that can be easily demonstrated.

Place the outstretched hand—either hand—on a flat surface (like a table top), with the fingers slightly flexed, in the position they would adopt on a keyboard; now raise each digit, singly and separately, as high as possible above the table. The thumb, index finger, and little finger can be raised quite freely, the middle finger less freely, and the ring finger least of all. This limitation of extension of the ring finger is caused by the restriction imposed on its extensor tendon by the oblique cross-connections which join it to its fellows of the middle and little fingers. According to "Dicky," it was Schumann's right ring finger that troubled him most, and his frustration with this anatomical "handicap" that caused him to use the mechanical device that led to permanent stiffness and the abandonment of his career as a performer. Furthermore, he

(ADW) had divided these cross-tendons in an amateur pianist, who had subsequently assessed the benefits of his operation as the equivalent of two years of hard practising!

Is it not possible that the oversensitive artist was looking for a "therapeutic" solution to his own technical shortcomings? And is it necessary to invoke a neurological lesion—or, indeed, any lesion—to account for them?

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Anaesthetists' Joint Working Party on Hospital Building Programme

SIR,—This Joint Working Party has been established by the Faculty of Anaesthetists of the Royal College of Surgeons of England and the Association of Anaesthetists of Great Britain and Ireland with the objective of "ensuring that anaesthetic requirements are taken into consideration in proposed hospital building programmes related to the Department of Health and Social Security (DHSS)." The composition of the working party is: Dr T B Boulton (chairman), Professor A R Hunter, and Dr H T Davenport (representing the faculty); Dr E B Lewis and Dr J M B Burn (representing the association); and Dr A Hind (co-opted to represent the DHSS).

The working party is currently establishing itself as the channel by which the interests of anaesthetists in the field of hospital building can be represented and supported at all levels in the National Health Service. It is preparing recommendations for the revision of the 1971 Design Guide *Anaesthetic Services in District Hospitals* (DHSS JH48/83) and is urging its universal application in future planning. It has been established that Design Guides now have the same authority as the Building Notes which preceded them, though some authorities seem reluctant to accept this interpretation of central DHSS regulations. The working party also intends to review all Building Notes and Design Guides relating to operating theatre suites, recovery rooms, intensive care areas, etc, and would welcome constructive suggestions.

The chairman and members of the working party would be pleased to advise and lend their support to individual departments of anaesthesia concerned with ensuring that the interests of anaesthetists are fully served in planning and constructing new buildings or reconstructing old ones.

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Mobility and the disabled

SIR,—As a disabled driver (RAF war pensioner) who has been involved in a variety of campaigns and investigations concerning mobility for disabled persons I write to say that I am appalled at some comments regarding "outdoor transport" in your leading article "Mobility and the disabled" (18 March, p 672).

At a time when practically all organisations (including the newly formed Motability Organisation) representing disabled drivers agree that the vital vehicle requirement is a four-wheel two- to four-seater car it is most