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## CORRESPONDENCE

Medical genetics R Harris, FRCP	More hydatidiform moles?  J P Calvert, MB	Infantile acne D Rowley-Jones, MRCP
Effect of abortion on obstetric patterns A F Pentecost, FRCSED	children G B McKelvie, frcsed 580	Bettley); Prednisolone for hay fever (J Cope)

Correspondents are urged to write briefly so that readers may be offered as wide a selection of letters as possible. So many are being received that the omission of some is inevitable. Letters should be signed personally by all their authors.

## Medical genetics

SIR,—Your leading article on medical genetics (30 July, p 279) correctly emphasised the need for medically trained and active geneticists. I fear, however, that the prescription contained in your article is for a physician or paediatrician with interest in medical genetics rather than for the type of individual needed to take part in the running of the genetic service which most regions have already established. Clinical geneticists, cytogeneticists, biochemists, nurses, clerical staff, and others work together in these centres to provide patients and their families with adequate pre- and post-natal diagnostic counselling and follow-up services. The clinical geneticist has a central role in this team since he has some of the clinical responsibilities and acts as a link man between patients, general practitioners, and other consultants on the one hand and the specialised genetic services on the other. The clinical geneticist faced with patients who may have diseases of any system must know when and to whom to refer the patient for specialised diagnosis and management. In this respect he closely resembles the family practitioner, who has long recognised his responsibilities to all of his patients however obscure their diagnosis. Like a GP he must remain flexible and resourceful, he must keep up to date over an enormous area, including rapidly evolving prenatal diagnostic techniques, and be able to assist in the diagnosis of rare syndromes. New discoveries are coming thick and fast and the genetic complexities of HLA and disease

are correctly the province of the clinical geneticist, who should act as first-line interpreter between the serologist and other clinicians. New and useful forms of treatment or diagnostic tests are imminent in at least a few of the following genetic diseases: Huntington's chorea, cystic fibrosis, and the muscular dystrophies.

The genetic team in each region will not, of course, itself provide the full range of clinical, laboratory, social, and other services which will be necessary, but the clinical geneticist has an important duty in surveying what is available and attempting by direct participation, or by the encouragement of others, to remedy any deficiencies. The basic necessities include the provision of genetic counselling clinics and reliable cytogenetic and biochemical laboratories experienced in handling both ante- and post-natal material, together with adequate back-up services including health visitors, social workers, and clerical staff.

Very few doctors practising today have had any real genetic training, but we must work towards the day when the majority of clinicians are competent to look after the genetic aspects of their own specialties. Clinical geneticists must play the leading part in postgraduate and undergraduate education in this area. In the meantime genetic counselling and referral for specialised genetic tests is not always done well in Britain and for some time to come clinical geneticists must play the largest part in seeing that the increasing and

reasonable expectations of patients can be met by improving available services. Your leading article will encourage many young doctors to seek a greater specialist knowledge of clinical genetics and this is excellent. However, physicians with an interest in medical genetics but who had more than two or three general sessions would be hard pressed to play their full share as one of two or at most three clinical geneticists in the regional service. The memorandum on training medical geneticists which was submitted to the Joint Committee on Higher Medical Training by a working party from the Clinical Genetics Society has indicated very clearly indeed the optimum training of the small number of clinical geneticists that will be required in Britain.

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## Ear-piercing problems

SIR,—Twenty children were seen in this department between 19 January and 25 June 1977 with problems following piercing of the ears. Their notes were reviewed retrospectively.

All the children were girls aged 6-14 years, six of them being only 6 years old. In 12 cases part of the earring had become embedded in the ear lobe and five of these had superadded infection. Four patients had infection at the site of perforation. Three children had suffered trauma to the earlobe; in two cases this was deliberately inflicted by another child and in the third the ear was injured by the stud during a fall. One child developed a keloid scar at the

site of perforation. In only one case was the problem bilateral.

Embedded earrings were removed, usually under local anaesthesia, but one child required general anaesthesia. Infected lobes usually drain and heal once the earring is removed, but one patient had an abscess which required incision and drainage. Three children needed antibiotics, one because a  $\beta\text{-haemolytic}$  streptococcus (Lancefield group A) was isolated. One child was ill with pyrexia and needed hospital admission because her mother felt guilty about having had her ears pierced and was convinced she had meningitis; she did not. Although we do not know about the child with keloid, who did not attend for follow-up, in all other cases the ear eventually healed well.

All the children suffered discomfort, three needed antibiotics, one a general anaesthetic, and one hospital admission. Ear-piercing is a fashion at present-at least in Sheffieldamong adults as well as children and even among boys, who frequently have one ear pierced. Although it has always been a practice among the immigrant community the children we now see are predominantly white and we have seen very young children, even babies, with pierced ears. The number of such cases has increased markedly over the past nine months

Although we do not know the incidence of complications of ear-piercing, we are concerned about the problems that it causes. In addition to those already seen we consider it possible that serum hepatitis could be transmitted in this way. In our view the medical profession should discourage this practice. We wonder if any colleagues have similar cases to report or views on the subject.

ANN L JAY

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## Stress incontinence

SIR,—As practising gynaecological surgeons we are somewhat disturbed by the excessive emphasis placed on the use of urodynamic and cinecystographic techniques in the management of stress incontinence. Not only in your leading article (2 July, p 3) but also in the resulting correspondence (23 July, p 261) there is the insinuation that without these techniques one cannot adequately treat this very distressing and difficult problem. We have been extremely fortunate to have the aid of an expert urodynamic unit to which all cases of mechanical and urgency stress incontinence have been referred during the past two years. Reference to this unit has been only after detailed clinical examination of the patients. In most cases we have found that the information as given by the sophisticated techniques corresponds to our own clinical impressions. However, in three cases our clinical examination and evaluation suggested predominantly stress rather than urgency incontinence, although urodynamically an unstable detrusor was noted. Heeding the scientific indications we delayed operation in them for many months, treating the women with conventional methods such as medication, bladder drill, and urethral dilatation. The symptoms persisted. In each case we eventually performed surgery with resultant cure of mechanical stress, and incidentally the coexisting element of urgency incontinence eventually improved. There was also a converse disparity, or so it seemed to us. In about one-third of cases of joint stress and urgency incontinence in which urgency of micturition was a major clinical factor urodynamic studies showed a completely stable detrusor muscle. Operative treatment was therefore indicated. but sometimes the degree of clinical urgency was so obvious that we held back and subsequent follow-up showed the correctness of that decision. It is frankly disappointing that the method is not as concise and helpful as we have been led to expect.

These facilities are available in some teaching centres but not peripherally and it worries us that they might be thought indispensable. As rightly mentioned in your article, well over 50% of patients with stress incontinence do not have prolapse. In these cases you infer that cine voiding studies are imperative. We would suggest that a careful history and physical examination, which would include examining the patient in the supine, prone, and standing positions, would in most cases give one the correct diagnosis. In these days of costeffectiveness, expenditure of vast sums of money on such sophisticated equipment should be questioned. It seems impracticable to refer every case of stress incontinence without prolapse to the already overcrowded urological units for resolution of a problem that can be effectively done in the outpatient department, though cases of recurrent incontinence certainly warrant these detailed investigations.

We have been using an operative technique 12 whose successful employment over 16 years may throw some light on the aetiology of mechanical stress incontinence. You, and others,34 suggested that the cause of this condition resides in the fact that the bladder base and proximal twothirds of the urethra are no longer subjected to the abdominal zone of pressures by virtue of their descent through the pelvic floor. In this latter position there seems to be unequal transmission of raised intra-abdominal pressure, especially when the woman stands, with resultant intravesical pressure exceeding intraurethral pressure. Stress incontinence is the result. In an operation devised by one of us (DHL) a sling procedure is per-formed by which two strands of the sheath investing the rectus abdominis muscle are brought down retropubically and joined in a cruciate fashion underneath the bladder base and proximal urethra to form a new pubocervical fascia.

We believe that the disruption of the pubocervical fascia either during childbirth, as a result of heavy traumatic work, or sometimes following gynaecological operations causes the bladder base to descend into the pelvic area. The cruciate sling operation as described above has been used on just over 100 patients in a 16-year period. Twenty-five women have been followed up for 4-16 years (mean  $8\frac{1}{2}$  years) and these will be the subject of a forthcoming report. Most of these patients had had multiple procedures for stress incontinence and the majority of them had a significant element of urgency incontinence. None of these patients had stress incontinence postoperatively and indeed the urgency incontinence improved over a two-year period after surgery. This propensity for the accompanying urgency to improve gradually once the mechanical defect had been corrected has been noted by others.5 Over the past four years we have completed a further 75 such operations and to date only one woman has returned with recurrent mechanical stress incontinence. She had already had four operative procedures performed for this symptom and had been incontinent since birth.

There is increasing evidence that restoration of the pubocervical fascia is the essential element in the cure of mechanical stress incontinence. Lateral cystourethrograms clearly show the bladder base and proximal urethra to be elevated back into the abdominal zone of pressure by this procedure. Stress incontinence is an extremely disruptive symptom both socially and emotionally and we feel that a national programme for its study, diagnosis, and treatment should be instituted by the Medical Research Council and/or the Department of Health and that special units be established to treat this condition.

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SIR,-Your leading article (2 July, p 2) on stress incontinence raises a number of interesting points which require comment.

Undoubtedly in the past there has been confusion between prolapse and stress incontinence. The two are not necessarily synonymous and successful treatment of incontinence due to urethral incompetence requires a knowledge of what one is trying to achieve. Perhaps the most important points are to elevate the bladder base and flatten the trigonal area and to expose the urethra to intra-abdominal pressure. With this concept in mind the Marshall-Marchetti procedure demands that the paraurethral vagina should be elevated as a sling and held against the back of the pubis. There are various points of operative detail which I believe require attention or the operation will fail. Having re-explored numerous "failed Marshall-Marchettis" I know that often the paraurethral tissues have never been touched and the only adhesion is between anterior bladder wall and posterior abdominal wall. These are failures of comprehension, not of a particular operation, and surely therefore it becomes impossible to assess the results of the Marshall-Marchetti operation without knowing how it was performed in the first place. The Burch colposuspension is probably a better concept and certainly leaves less latitude to the surgeon, and I have recently been persuaded to adopt this procedure as the treatment of choice for urethral incompetence.

As you rightly point out the diagnosis and treatment of stress incontinence may be simple and require no sophisticated apparatus. Full urodynamic investigations must be available to anyone who sets out to treat incontinence, but may I draw your attention to the inestimable value of more simple observations? These are the conscious and unconscious capacities, residual urine, and flow rate. Combined with a simple fluid balance chart and observation by informed nurses, an accurate diagnosis can often be made which is confirmed by subsequent urodynamic studies. These tests can be performed anywhere.

Your article emphasises the difficulty of differentiating stress from urge incontinence. This is particularly obvious in the elderly patient, where the clinical history is almost irrelevant. In my experience the two most common causes of stress or urge incontinence