Screening for cervical cancer

Your leading article on this subject (18 September, p 659) and Dr R A A R Lawrence's letter (25 September, p 754) both point the way to better screening systems which do not depend solely upon action taken by women. However, neither spelt out the simple system already available in many general practices for such screening. I refer to age-sex registers.

An age-sex register provides a simple method of identifying groups of patients and can be used to note screening (and other) procedures. A thin coloured tag can be applied to denote a cervical smear and different colours may be used for different years. Responsibility for marking the cards can be delegated to a practice ancillary. Family doctors should receive reports of smears carried out in hospital or family planning clinics and these may be recorded as well as those done by the practice. At any one time those women who have not been screened may be identified and either the doctor or the health visitor can follow them up.

Clearly there are many refinements which may be built into such a system. Four are obvious: it is possible for the doctor and his health visitor to identify the "at risk" women and direct a screening programme towards these; the intensity of individual screening can be better controlled and limited resources made available to all at risk; recall systems can be simply devised; and the record cards can be code-marked when a cervical cytology fee is claimed.

If money were to be spent in providing all practices with age-sex registers and with staff to help maintain them Britain might have one of the most comprehensive cervical cancer screening programmes in the world.

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SIR,—Your leading article on screening for cervical cancer (18 September, p 659) was constructive, balanced, and encouraging.

I write to make a plea for continued screening for breast cancer. The fact that the group that avails itself of present cervical screening is not that at high risk for cervical cancer but that at high risk for breast cancer means that the failure to palpate the breasts at the time a cervical smear is taken is a mockery of good preventive medicine.

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Prostatic cancer

SIR,—In your leading article on this subject (28 August, p 490) you did not mention the place of external irradiation in the treatment of the localised form of this disease.

In view of the high accuracy of lymphography[1] and bone scanning[2] in detecting tumour spread to lymph nodes and bones it seems unjustified to treat patients with disease confined to the prostatic region and/or the regional lymph nodes by transurethral resection and wait-and-see policy only.

Although the reported experience of treating such cases by external irradiation from Britain is limited,[3] others have shown its effectiveness.[4 5] So far I am unaware of a controlled clinical trial to evaluate this method, and the need for a national or regional controlled clinical trial to assess it is obvious.

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Pathogenesis and epidemiology of schizophrenia

SIR,—Your leading article on this subject (8 September, p 662) well illustrates some of the pitfalls awaiting commentators on current psychiatric research. May I comment briefly on some of the unconscious assumptions contained in the article since they contribute to that most energetic of enterprises—psychiatric myth-making.

(1) Because aspects of human behaviour are observed as common to all cultures the assumption cannot be made that the behaviour is a "disease," however bizarre or "abnormal" the phonomenon is considered. Individuals in all societies experience nightmares and excessively excitable behaviour occurs in non-human primate cultures, domestic animals such as the dog or cat, and in young children of many cultures. Such behaviour, however, does not necessarily constitute a "disease" requiring "diagnosis" and "treatment."

(2) Many of the assumptions made in psychiatry on the basis of epidemiological research are invalid since they do not take into account changes in time. The relatively simple mathematics required for such transformations seems to escape the grasp of most epidemiologists. Thus human beings evolve, cultures evolve, symptoms evolve, observers evolve, and categories evolve. It is not just that the symptoms of "masturbatory insanity" are subsumed under another category—that indeed may be so—but also that the static entity "masturbatory insanity" no longer exists for the counters to count. Some anthropological researchers of high repute failed to find "psychosis" in certain "underdeveloped" cultures years ago. A few decades later they found it. Later still the traditional categories of "mental illness" seemed to have declined. Some anthropologists have considered the possibility from observations of developed societies that "psychosis" peaks and then declines as a society develops. They may or may not be correct. It is too early to make assumptions. However, such facts do underline the difficulty of making assumptions from current epidemiological research.

(3) It is both dangerous and invalid to equate "genetic" (a biological category) with "medical" (a matter of professional interests and having arbitrary limits).

(4) One can "treat" almost any human behaviour, from outbursts against State tyranny to middle-aged loneliness, from evangelical religion to agoraphobia, with drugs or any other methods. However, the assumption that it is always of "value" so to do is obviously a matter for debate.

(5) The myth that a "drug revolution" has altered the quality or quantity of a particular arbitrary category of "mental illness" in a society is not consistent with the facts. The available evidence is quite to the contrary and points to an evolutionary process.

The result of a beginning in research is a middle in which new hypotheses are necessary, and if there is to be an end it will be as indeterminate as the point of departure. Thus research on "schizophrenia" may become an investigation of the biochemistry of the central nervous system, or of human evolution, normal and abnormal, but certainly it will produce answers not to the original question but to new and as yet unasked questions. Unless psychiatric researchers realise that it is almost impossible for them to research stasis they will never join other disciplines and be eligible for the membership of the college of modern science.

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Pelvic infection and intrauterine devices

SIR,—Your leading article (25 September, p 717) correctly emphasises that pelvic infection is a complication of the intrauterine contraceptive device (IUD) but its precise incidence remains undetermined. However, it is notoriously difficult to diagnose pelvic sepsis on clinical grounds alone. Jacobson and Westrom,[1] in a laparoscopic study of 814 cases of clinical pelvic sepsis, confirmed the diagnosis in only 65% of cases studied. Other pathology was found in 12% and the pelvis had a normal appearance in 23%. Some doubt must therefore be cast on the many surveys relying on clinical findings alone.

A subsequent laparoscopic study from the same department by Westrom[2] shows the effect of pelvic sepsis on fertility. There were 415 women who had developed pelvic sepsis 6-14 years earlier. Of these, 12·2% were involuntarily childless and 63·4% had become pregnant. In a further study Westrom *et al*[3] showed that the overall risk of developing salpingitis in women using IUDs was increased three times compared with matched women who were using other methods of contraception. The risk was even greater for nulliparous women. Many of the patients studied were using copper-containing devices, yet our investigations currently in progress have shown a lower incidence of bacterial contamination of the uterine cavities with copper devices compared with others.[4]

The likelihood that the cervical appendage is a significant factor, as indicated earlier by one of us,[5] remains an open question and needs to be investigated. Indeed, the nature of the cervical appendage might be a significant factor in the ascent of organisms up the genital tract.[6] However, clinical studies are required and such studies are in progress.

Finally, the implication that copper offers protection against gonorrhoea may well have been over-emphasised. Although it may play some role, a recent report by Johannisson *et al*[7] showed no difference between copper IUD and oral contraceptive users in relation to the incidence of gonorrhoea. They demonstrated no in-vitro inhibition of gonococci by copper in the presence of serum proteins.

Further, Chantler *et al*[8] have shown that the copper wire on IUDs becomes rapidly coated with a surface deposit which greatly reduces the release rate of copper and the availability of copper ions.

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Diagnosis of amyloidosis

SIR,—In a recent short report Mr P Nimoityn and his co-authors (31 July, p 284) report the detection of urinary amyloid in a patient with familial Mediterranean fever. At the conclusion of their comment they state that "the detection of urinary amyloid fibrils by electron microscopy is a practical and non-invasive alternative diagnostic method for patients suspected of having renal amyloidosis." They rightly point out that renal biopsy may be hazardous in patients with renal amyloidosis, but it is surely relevant that in the case they report amyloidosis had already been diagnosed by rectal biopsy.

Since the original report of Gafni and Sohar[1] advocating rectal biopsy as a means of diagnosing generalised amyloidosis there has been ample confirmatory evidence to support biopsy of the rectum as the best and usually the only site required to establish a tissue diagnosis. In contrast to renal or liver biopsy, rectal biopsy is a simple and painless procedure with little or no risk to the patient. In a detailed study of the distribution of amyloid at necropsy in a large number of patients with generalised amyloidosis secondary to the septic complications of paraplegia, rheumatoid arthritis, and tuberculosis[2 3] it was shown that the accuracy of rectal biopsy is at least 90% and that the pattern of distribution of amyloid in the rectum can add useful information to the pattern found throughout the body and the likelihood and rate of renal involvement. In conjunction with Dr Arapakis[4] rectal biopsy was used as the most appropriate method to estimate the incidence of amyloidosis in rheumatoid arthritis and was found to detect amyloid in a proportion of cases before significant proteinuria was present.

Over the past four years serial rectal biopsy has been used in this hospital both to establish initial diagnosis and to follow the natural history and judge the effect of possible therapeutic agents in a series of 25 patients attending an amyloid clinic. In none of these cases was it thought necessary to perform biopsy of other tissues for either the diagnosis or management of the disease. Apart from slight rectal bleeding in a few cases the patients have suffered no ill effects. Rectal biopsy at six-monthly intervals provides a permanent histological background to a condition in which the clinical and biochemical findings can vary greatly.

While I admit that the detection of urinary amyloid fibrils is a non-invasive technique, it seems that it is possible only in the late stages of renal amyloidosis and it involves the expensive and not universally available technique of electron microscopy. Since there is ample evidence of both the efficacy and safety of rectal biopsy I would like to suggest that this tried, simple, cheap, reliable, and harmless method remains the histological "sheet anchor" for the diagnosis and management of this still fatal and little understood condition.

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Diabetic ketoalkalosis

SIR,—We read with great interest the recent reports of diabetic ketoalkalosis by Drs K C Lim and C H Walsh (3 July, p 19) and Dr Elaine B Melrose and others (24 July, p 237), in which it was suggested that diabetic ketoalkalosis was due to severe vomiting or alkali ingestion. We wish to report a case of diabetic ketoalkalosis in which there was no history of alkali ingestion, no vomiting, and no hypokalaemia.

The 70-year-old patient, a long-standing diabetic capable of giving a good history, was admitted for stabilisation of her diabetes before amputation of her right leg for gangrene of the foot. The results of the biochemical investigations on admission were: blood glucose 26·4 mmol/l (476 mg/100 ml), pH 7·47, P_{CO_2} 5·6 kPa (42 mm Hg), standard bicarbonate 29·5 mmol (mEq)/l, base excess +6 mmol (mEq)/l. There were ketones ++ in the urine. Fourteen hours later, during which time she had received a total of 56 units of soluble insulin but no intravenous fluids, the blood glucose had fallen to 9·8 mmol/l (177 mg/100 ml), but she remained alkalotic, the blood pH being 7·51, P_{CO_2} 5·2 kPa (39 mm Hg), standard bicarbonate 31·5 mmol (mEq)/l, and base excess +7·5 mmol (mEq)/l. At this time, serum urea and electrolyte levels were normal, notably the potassium level, which was 3·6 mmol (mEg)/l.

The occurrence of ketoalkalosis in a diabetic in whom there was no clinical evidence for the condition emphasises the need already stressed by the previous authors for biochemical monitoring of the acid-base state before applying corrective measures.

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Ketamine hydrochloride: a potent analgesic

SIR,—The following case report demonstrates the powerful analgesic effect of subdissociative doses of ketamine hydrochloride.

A 59-year-old steel erector fell from scaffolding fracturing several ribs, which resulted in a flail chest. While clinically he could just about manage with this embarrassment to respiration, it became necessary for him to undergo laparotomy for a carcinoma of the colon, which had been found while he was in hospital. The following day the patient, now with a transverse colostomy and a flail chest, was in respiratory failure, mainly owing to retention of bronchial secretions due to the severe pain of adequate coughing. His P_{CO_2} was 5·6 kPa (42 mm Hg), P_{O_2} 8 kPa (60 mm Hg), and base excess 9 mmol (mEq)/l.

It was felt that if effective coughing could be re-established it might be possible to manage the case without ventilation, which at the time would have been difficult to institute because of extreme pressure on intensive care beds. Further deterioration in the blood gases, which were frequently measured, would, of course, have been treated with intermittent pressure ventilation.

Ketamine hydrochloride, given in subdissociative dosage, is the only analgesic powerful enough to allay this degree of pain without causing respiratory depression. Accordingly ketamine 0·5 mg per kg was given intravenously. In less than two minutes the patient volunteered that he was pain-free for the first time since his fall. On request he gave a respectable cough, bringing up sputum. Simultaneous physiotherapy resulted in the clearing of secretions. This process was repeated three times daily for the next three days. The patient made good progress and never needed ventilation as he almost certainly would have done otherwise.

The psychotomimetic reaction or unpleasant dreams experienced when the full, dissociative dosage of ketamine is used (around 2 mg/kg intravenously) is not a problem at this dosage level.[1–5] Consequently fear of causing these reactions need not deter the clinician from using this valuable, safe, and powerful analgesic where appropriate.

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Security units for dangerous and difficult patients

SIR,—May I congratulate Dr J H Price on his thoughtful letter on security units (25 September, p 756)? As a forensic psychiatrist actively involved in the new developments I too am very worried about some of the ideas which are currently being aired. He is right; a static model of security based on notions of custody will do immeasurable harm to our psychiatric services in a number of ways. Not only will it bring a negativistic philosophy back into psychiatry but it could well convince a lot of hard-pressed general psychiatrists and nurses that mentally abnormal offenders and difficult patients are no longer their responsibility. "Oh, he's forensic, he should go to the security unit" could become the cry of the future. Indeed, such attitudes already exist and partly account for the increasing pressure on special hospitals.

Perhaps Dr Price will be encouraged to learn that at least one region is adopting a dynamic model rather along the lines he suggests, although we are concerned with NHS facilities and will not have formal links with prisons. In the South-east Thames Regional Health Authority we are not proposing to have a security unit; instead there