developed sneezing and rhinitis, but on this occasion I developed severe bronchospasm within a few minutes. With conventional treatment for the asthma (a beclamethasone diproprionate inhaler) the response to alcohol was greatly reduced, but experimentation with whisky showed that the asthmatic symptoms depended on the brand of whisky. Other alcohols such as wines did not produce symptoms.

Gong *et al* reported that it was the congeners in alcohol and not alcohol itself that produced symptoms in asthmatic patients. My inquiries have suggested that few doctors are aware of an association between alcohol and asthma.

I would naturally consider sympathetically any invitation to take part in clinical trials requiring ingestion of whisky for medicinal purposes.

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is to establish, through adequate clinical trials, the optimum management of localised prostatic cancer. There is little point in making early diagnoses if we do not know what to do next.

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in survival arising from treatment requires randomisation of large numbers of patients. We should not consider the need for early detection of localised prostatic cancer until its treatment has been subjected to such assessment.

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Screening for prostatic cancer

EDITOR,—Fritz H Schröder makes a cogent case against widespread screening for cancer of the prostate.[1] One crucial criterion in justifying a screening programme is that intervention is more effective in presymptomatic disease than after symptoms have appeared. This has never been shown for prostatic cancer. No treatment at any stage of disease has been shown to improve survival in an adequate clinical trial. The statement that "radiotherapy and radical prostatectomy are effective in treating locally confined prostate cancer" (cited with a reference to an American consensus conference) is not justified by the available evidence.

Assessing treatment in early prostatic cancer is difficult. Ten to 15 years of follow up is required, in a population with considerable competing risks of death. Studies of series of patients who have been operated on report survival not much worse than that expected for the age matched general population,[2] but they ignore the possible effects of length-time bias and case selection for operation. In a series of 223 localised carcinomas managed expectantly five year disease specific survival was 94% and 10 year survival 85%, although the figure was much worse for poorly differentiated tumours (25% survival at five years).[3] In one randomised controlled trial of radical surgery 111 of 142 patients with cancer confined to the prostate were followed up for 15 years.[4] Survival curves were identical for patients who were and were not operated on and were only slightly worse than expected for the general population matched for age. Another trial in 97 patients showed an advantage for surgery over radiotherapy in forestalling the appearance of distant metastases over five years.[5] Radical prostatectomy is a major operation with potentially serious morbidity (including impotence and urinary incontinence)—risks worth taking only once benefit has been established unequivocally.

In advanced disease hormone treatment (chemical or surgical castration or oestrogens) relieves symptoms and improves general wellbeing. Early endocrine treatment may delay progression of disease but has never been shown to prolong survival.[6] Evidence that total androgen blockade (castration plus an androgen antagonist) is more effective than castration alone[7] has not been confirmed in two other trials.[8,9]

Though trials of screening for prostatic cancer are to be welcomed, surely a greater priority

EDITOR,—We agree with Fritz H Schröder that screening for prostatic cancer is not presently justified.[1] Gaps in understanding of the disease and its treatment and the unsuitable characteristics of available diagnostic tools mean that prostatic cancer fails to meet most of the standard epidemiological criteria required for a successful screening programme.[2] We also agree that even effective treatment may not bring benefit in all cases of localised cancer because of competing causes of death and the slow rate of progression of disease in some cases.

We question, however, Schröder's implication that effective treatment exists, believing that his assertion that "radiotherapy and radical prostatectomy are effective in treating locally confined prostatic cancer" is particularly misleading. In an asymptomatic patient effectiveness implies improved disease specific survival. No randomised trial has shown such effectiveness. On the contrary, evidence indicates that disease specific survival rates quoted in uncontrolled trials cannot be interpreted as evidence of therapeutic benefit.[3] We suggest that the issue is not that "a considerable possibility of overtreatment" exists[1] but that potentially damaging and ineffective treatment may be undertaken outside the confines of a randomised controlled trial.

Over 20 000 radical prostatectomies were performed in North America in 1991, and several centres in Britain undertake the procedure. The cost to the patient is often high: some patients die, and impotence and incontinence are recognised complications.[4] A similar willingness to perform radical treatment for breast cancer in the absence of evidence from randomised trials led to the misguided mutilation of thousands of women by radical mastectomy.

The resource implications of such procedures are substantial. Registrations of cancer show that the incidence of prostatic cancer in England and Wales is 39 per 100 000 males.[5] On the basis of Schröder's figures this could lead to over 2500 radical prostatectomies a year. This ignores the substantial number of additional cases that would arise if screening became widespread. Tariffs for extracontractual referral indicate that the estimated cost to the NHS of such surgery exceeds £10·8 million. If the only effect on health of such interventions is adverse this seems remarkably poor value for money.

Unbiased assessment of moderate differences

EDITOR,—Fritz H Schröder's editorial is a measured evaluation of the issues surrounding screening for prostatic cancer.[1] Such an approach is vital with the increasing demands being placed on health professionals to detect and treat disease before it is clinically apparent. I believe, however, that Schröder has amalgamated two issues—screening and treatment of early prostatic cancer—into one when they should be argued separately.

Whereas in breast and cervical cancer active treatment is instituted on detection of the disease, it is argued that screening would not be appropriate in localised prostatic cancer because no treatment is often the option chosen.[2] George has shown this to be a satisfactory option, reporting a five year survival of 80%,[3] but this has never been compared in a randomised controlled trial with a treatment regimen. The slow rate of progression to metastasis coupled with the predictable behaviour of localised prostatic cancer[4] provides a window in which the diagnosis can be made before the disease has spread, with a possible reduction in the morbidity and mortality.[5] The high incidence of metastatic and thus incurable disease at presentation[6] is sufficient evidence that a large group of patients might be helped if the disease was detected earlier. The relatively inexpensive initial methods of screening available (that is, digital rectal examination and measurement of the prostate specific antigen concentration) and the advances in transrectal imaging with ultrasound and magnetic resonance imaging all serve to provide a sound backdrop for a screening programme.

Thus the real question seems not to be whether we should detect the disease but how best we should treat it if it is detected. The controversy regarding treatment should not be allowed to detract from screening as improvements in current methods of treatment and the introduction of new strategies in management are likely to emerge; it serves to make the point that a randomised controlled trial comparing the different methods of treatment and non-treatment should also be instituted.

Mass screening is not feasible, but targeting groups at high risk and asking them to attend for screening is perfectly plausible. These groups can be defined only by pilot programmes specifically designed to identify the characteristics of such groups. The earlier detection of prostatic cancers that have not spread will surely allow us the opportunity to treat and cure some of these

patients. Exactly which is the best treatment regimen is a separate issue.

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EDITOR,—Fritz H Schröder rightly emphasises that it is not known whether treatment of early prostatic cancer is beneficial or whether screening for the disease offers any advantage.[1] This debate will never be resolved unless it can firmly be established whether searching for early prostatic cancer on a community basis is worthwhile in clinical, resource, and social terms.

In Gwent we have embarked on a major study to do this and will be offering a prostate health check to over 10 000 men aged between 55 and 70 in a study that is associated with the European programme concerned with early prostatic cancer. We aim to complete the groundwork within 12 months but hope that concurrently British urologists will agree to work together in a randomised study of treatment for prostatic cancer confined to the organ. Radical prostatectomy is likely to be one treatment arm. We wonder, however, whether a surveillance arm would be acceptable to many ethics committees and patients now that informed consent is mandatory.

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EDITOR,—Though we agree with Fritz H Schröder that some of the intriguing scientific questions about the natural course of prostatic cancer could be answered in a randomised controlled trial of screening,[1] we are concerned that the possible adverse effects of screening may be arguments against such an exercise.

Schröder estimates that the detection rate is 2·5%, which is 15 times the present incidence of 1·4 new cases/1000 men aged 60 to 74 in England and Wales. Such a high ratio of prevalence to incidence suggests either a long lead time, which is not typical of the invasive cancers that are the intended target of the screening programme, or a large element of overdiagnosis of slowly progressive disease, or both.

We estimate that 150 000 men aged 60 to 74 would be required in an evaluative trial for it to have an 80% chance of showing a 20% reduction in mortality over the ensuing 10 years, significant at the 5% level. Given the incidence and case fatality in British men aged 60 to 74 at entry, such a 20% reduction in 10 year mortality would amount to 81 fewer deaths in the 75 000 men offered screening. On the assumption that 60% would attend for screening, 1125 of those might be diagnosed as having prostatic cancer at the first screen. All these men (and presumably others with cancers detected at subsequent screening rounds) would be exposed to the risks of radical prostatectomy, which may cause impotency in up to 42%[2] and urethrovesical stricture in 7%.[3] Radiation therapy may cause short term effects such as sickness and long term effects such as urinary and intestinal problems and fibrosis of soft tissue.[4] The adverse consequences to the health of men in their seventh, eighth, and ninth decades could thus be considerable and might well counterbalance the small benefit of screening in terms of reduced deaths.

Perhaps it would be wiser to concentrate research on the development of non-invasive biological markers to distinguish rapidly progressive from slowly progressive tumours as well as on the development of less invasive (for example, endocrine) treatment. With such tools for diagnosis and treatment, screening for prostatic cancer would be much more feasible.

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AUTHOR'S REPLY,—Kate Lawrence and colleagues criticise the concluding statement of the US National Cancer Institute's consensus conference (reference 9 in my editorial) that effective treatment of prostatic cancer is available. I was careful to review the effectiveness of treatment and to state that no evidence of effectiveness of radiotherapy and radical prostatectomy is available from prospective randomised comparative studies. The effectiveness of a procedure can, however, also be defined as its ability to eradicate tumour locally. In this sense, with the usual limitations of any procedure applied to patients with cancer, the two available techniques are effective. Local eradication of prostatic cancer probably occurs more commonly with radical prostatectomy than with radiotherapy.

Several times Lawrence and colleagues accentuate the damaging effect of treatment on patients with cancer of the prostate. This is where I disagree. Radical surgery for prostatic cancer has become acceptable so far as long term functional results are concerned: continence can be maintained or restored in virtually all patients, and potency is maintained in 50-70% of those who are potent preoperatively. I made clear in the editorial that no randomised comparative trial is available and that there is an urgent need for such information. Several attempts to carry out such studies, however, have shown the great logistic difficulties entailed, which may prevent such a study in the future. A Scandinavian study uses a randomisation scheme which will probably prevent the group from obtaining a scientifically valuable result. To my mind the only possibility of solving this problem lies in a large European prospective randomised screening study comparing screening with no screening and using mortality from prostatic cancer as its major end point. Pilot studies for such a European protocol are currently being conducted.

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Dangers of long waiting times

EDITOR,—It is a fact of life that any specialist outpatient clinic will have a waiting list. Priorities regarding the degree of urgency of an appointment must be decided on the basis of the information received in the referral letter.

It is salutary that in their report on the dangers of long waiting times for outpatient appointments at a urology clinic K German and colleagues say that five of the seven cases of prostatic cancer were detected on rectal examination and one by a raised serum prostate specific antigen concentration. Unless general practitioners can be persuaded that a digital rectal examination is not a physical assault and that measurement of serum prostate specific antigen concentration is a sensitive screening test for prostatic cancer, no progress will be made in detecting prostatic cancer. Both of these investigations should be mandatory in patients presenting with symptoms of bladder outflow obstruction, and if either is abnormal some priority can be afforded to the referral letter, particularly if the patient is aged under 65.

The authors do not state whether they actually treated the patients found to have prostatic cancer. The patients' symptoms of bladder outflow obstruction may well have been due to benign prostatic hypertrophy and the coexistent prostatic cancer may have been an incidental finding. For patients in the usual age group who present with symptomatic outflow obstruction and have "incidental" well differentiated prostatic cancer confined to the gland, most urologists in Britain would perform a transurethral resecton to relieve the symptoms but adopt a policy of watchful waiting regarding the cancer. In other words, the delay in initial diagnosis of a few months may not matter that much to the urological management of most such patients in Britain.

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1 German K, Nuwahid F, Matthews P, Stephenson T. Dangers of long waiting times for outpatient appointments at a urology clinic. *BMJ* 1993;**306**:429. (13 February.)

Reducing waiting lists requires more staff

EDITOR,—K German and colleagues' paper and Catherine Pope's editorial emphasise the current attention directed at reducing waiting lists in the NHS.[1,2] Much of the debate has related to reducing waiting times for surgery rather than for outpatient appointments.

As in urology,[1] in neurology waiting times for outpatient appointments are too long despite the unacceptably large numbers of patients seen in outpatient clinics. Similar anxieties exist about the morbidity and mortality of patients who cannot be seen within a satisfactory time. This picture is not specific to neurology services in this regional centre. It is replicated at other centres and units in district general hospitals providing neurological services throughout Britain. Waiting times in this centre exceed five months despite full clinics and extra, urgent cases being seen outside normal times set aside for outpatient clinics.

The medical problem is directly related to the inadequacy of available resources. The necessary solution lies in additional consultant appointments and also additional staff in training grades. These problems need to be addressed before waiting lists can be responsibly reduced. A critical level of professional staff is required to provide adequately for the clinical needs of patients who are referred, irrespective of additional needs to provide excellence in postgraduate clinical training and research.