predicted, peer review alone was sufficient to reduce greatly the booking of unsuitable cases.

#### The sting

A review of the unit's work during the past two years also showed how little intrapartum obstetric experience the average practitioner now has. Even the local doctors who used no other unit had an average of only 15 confinements there a year. Of course, several factors, particularly the falling birthrate, are responsible for the decreasing use of the GP maternity unit but the classification of an increasing proportion of cases as "high risk" and suitable only for booking at a consultant unit is a major one. Our criteria at the moment are not the strictest and if we

# Clinical Topics

adopted the policy of the Royal College of Obstetricians in not booking nulliparae our work would be almost halved again.

By invoking a system of peer review, we appear to have changed our booking behaviour and reduced our obstetric responsibilities. Will we reach a point where many practitioners will carry out so little intrapartum care that they are unjustified in continuing this work? Will the GP maternity unit have so few bookings that its future is in jeopardy on economic grounds? In our efforts to be better doctors we may have accelerated our own demise as obstetricians and taken from the community a much valued resource.

I thank Dr Peter King, chairman of Greenways Hospital Medical Committee, for his advice in preparing this paper.

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# A haematuria diagnostic service

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#### Summary

In a haematuria diagnostic service, covering experience with 95 patients, 12 new cases of cancer of the bladder, one of cancer of the kidney, and one of cancer of the penis were identified—all at an early stage. Patients presenting with haematuria were investigated rapidly without disruption of the routine work of the urological unit. Patients who identified the symptom and sought advice early were given a definite diagnosis quickly, and treatment for any malignant disease was started early. The delay that undoubtedly endangers patients' lives has been considerably reduced by this service.

#### Introduction

Patients readily recognise haematuria and usually seek medical advice early. Wallace and Harris<sup>1</sup> showed that delay in diagnosis of patients presenting with haematuria produced a notable detrimental effect on the prognosis for those with infiltrating bladder tumours. Figures from the South Metropolitan Cancer Registry showed that if treatment was started within one month of the onset of bleeding the crude three-year survival was

Urological Unit, Royal Marsden Hospital, London SW3 6JJ A G TURNER, BSC, FRCS, lecturer in urology W F HENDRY, CHM, FRCS, consultant urologist G B WILLIAMS, MS, FRCS, consultant urologist D M WALLACE, MB, FRCS, professor of urology, University of Riyadh 60%, whereas with a delay of one to six months the crude three-year survival was reduced to 25%.

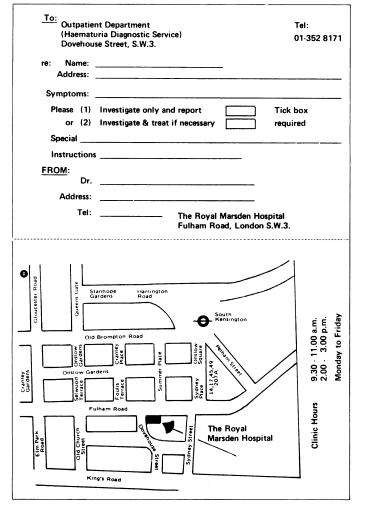
The causes of delay could be divided into: (a) delay in the patient seeking medical advice, (b) delay due to the general practitioner—from patient first seeking advice to hospital referral, and (c) delay at the hospital—either before appointment at outpatients or on the waiting list for admission. In fact, most patients reported their symptom quickly, and few doctors hesitated to refer them for specialist investigation. By far the greatest single factor in delay was at the hospitals. Therefore the responsibility for more efficient diagnosis and treatment rested with the hospital, its appointment system, and its arrangements for investigation and admission.

#### **Clinical methods**

A haematuria diagnostic service was started at the Royal Marsden Hospital as a pilot study specifically to try to reduce the hospital delay. Two facets of the problem were considered.

Referral to outpatients—General practitioners were circulated with an explanatory note and a supply of referral cards. These cards (fig 1) were filled in by the practitioner on one side with basic details, and on the reverse side there was a map of the location of the hospital to enable patients to reach the hospital easily. General practitioners were asked to send the patient straight to the outpatient department of the hospital (9.30 am to 3.00 pm, Monday to Friday). On arrival at the outpatient department, the patients were seen immediately by either the lecturer or senior house officer of the urology unit.

Investigation and admission—The doctor took a history, examined the patients, and arranged for urine bacteriological and cytological studies, chest radiography, and intravenous urography to be performed. A return appointment was made for the next outpatient clinic, when the patient was seen by the consultant with all the basic investigations completed. An admission date was then arranged, usually for cystoscopy under general anaesthesia on the next operating list. The time from arrival at the general practitioner to admission to hospital was thus reduced to a few days.



### Results

From 1 November 1973 to 31 October 1976, 95 patients were referred specifically to the haematuria diagnostic service rather than to urological outpatients. There were 57 male patients and 38 female. The average age of the males was 50.3 years and of the females 44.6 years (table I).

Over 62% of patients had had their symptoms for less than one week (table II), usually only for one or two days before they sought medical advice. About 85% had had the symptom for under one month and then it was usually intermittent. Of the male patients, 44% had had similar symptoms before: of these, 60% had sought medical advice previously but had not been referred to hospital at that time. Of the female patients, 60% had had previous symptoms, and of these, 86% had not been investigated before. The remaining patients had not sought medical advice previously.

Seven patients refused admission, and three others were not admitted because they were already under investigation at other units and hence were transferred back to these units. Of the 88

TABLE I—Age and sex of 95 patients presenting to the haematuria diagnostic service

Age (years)	Male	Female
≤10	1	
11-20	2	3
21-30	9	11
31-40	10	3
41-50	5	7
51-60	9	5
61-70	13	4
71-80	6	3
81-90	2	2
≥91		
	57	38

TABLE II—Time between onset of symptoms and investigation at hospital

Duration of symptoms before presentation (weeks)	Male	Female
<1 1-4 5-12	34 12 3	25 9 3
13-26 27-52 >52	3 1 4	
No haematuria		1

TABLE III—Time between arrival at hospital and cystoscopy

Length of time (weeks)	Male	Female
<2 2-4	35	19
5-12	7	
13-26	•	i i
27-52 Refused to be admitted	5	2
Not admitted (under		
investigation elsewhere)	3	

TABLE IV—Diagnoses of 95 patients attending haematuria diagnostic service

	No o	f cases	
Diagnosis —	Male	Female	
Non-malignant disease:			
Infective cystitis	10	26	
Infective prostatitis	15		
Benign prostatic			
hypertrophy	10		
Urinary lithiasis	2	3	
Postradiotherapy	_	1	
Meatal stenosis	1	-	
Aalignant disease:	-		
Kidney		1	
Bladder stage T1	8	2	
Bladder stage T2	0	1 ī	
Bladder stage T3, T4		-	
Bladder stage Tx	1		
Penis (also cancer of	-		
bladder)	1		
xtraurinary Tract	-	1	
nknown	9	2	
efused to be admitted	ś	2	

patients who were admitted for cystoscopy (table III), 71% of males and 53% of females were admitted within two weeks, and 85% of males and 83% of females within one month of the first visit to hospital. Patients with obvious urine infection accounted for this delay in admission.

The diagnoses of the 95 patients attending the clinic are shown in table IV. Bladder tumours, if present, were classified according to the UICC classification  $1974.^2$  All but two of the tumours identified were T1, the exceptions being an invasive tumour (T2) and one classified as Tx (which was a tumour in a diverticulum).

Of the 12 cases of bladder tumour, 11 presented with the classic symptoms of painless haematuria, but one case presented with painful haematuria. Three patients had had a previous episode treated as a urinary tract infection and had not been referred for investigation then. One of these was found to have an invasive (T2) tumour. Urinary cytological investigation in these 12 cases had a false-negative rate of 83 % (table V).

# Discussion

Patients usually seek advice early after observing haematuria —over 60% of our patients had had their symptoms for less than one week and 85% for less than one month. Any delay in the diagnosis of this symptom of possible malignant disease is unacceptable after the patient has sought medical advice, most especially after the general practitioner has specifically referred the patient to hospital for investigation and diagnosis.

As a result of setting up a haematuria diagnostic service we were able to reduce the two main causes of delay in diagnosis,

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TABLE V-Symptoms and findings in 12 cases of carcinoma of the bladder

	Male	Female
Total cases	9	3
Average age (years)	67.3	67.0
Symptoms		_
Painless haematuria	9	2
Painful haematuria		1
Previous symptoms:		
None	4	
Present { advice sought no advice sought	2*	1*
Findings	3	2
Urine bacteriology:		
infection		
no infection	9	3
Urine cytology:		-
malignant cells	2	
normal	7	3
Intravenous		
pyelography:		
abnormal	5	2
normal	4	1

\*Treated as urinary tract infection.

as  $65^{\circ}_{o}$  of patients were admitted within two weeks of seeking medical advice and  $85^{\circ}_{o}$  within one month. Diagnosis within one month has been shown to be associated with appreciable improvement in prognosis.<sup>1</sup> The fact that tumours found so far in the haematuria diagnostic clinic have all been at an early stage seems to justify this haematuria service, in that when a tumour is found it should be either T1 or T2, and not deeply

Oranges are treated with orthophenylphenol thiabendazole. Is there any danger if the rinds are used in cooking?

The question is misleading: orthophenylphenol and thiabendazole are two different fungicides that have been applied alternatively, but not together, to the peel of citrus and other fruits. The former is volatile and tends to taint the food with its smell. It has been subjected to fewer tests than the latter and some countries do not permit its use. Innes et  $al^1$  saw no excess of neoplasms in mice fed for a prolonged period on a diet containing 100 ppm orthophenylphenol. Thiabendazole, which has antihelminthic properties in addition to being fungicidal, has been the subject of numerous short- and long-term studies in animals. It is of low toxicity generally,<sup>2</sup> appears to be without carcinogenic or teratogenic effects at any level, and does not adversely affect fertility or reproduction (in rats) at levels of 0.1% or less in the diet. In the light of a full consideration of the toxicological data, the 1970 FAO/WHO Joint Expert Committee determined that a daily intake of 0.05 mg/kg body weight would not adversely affect human health. The presently permitted level of up to 10 ppm thiabendazole in oranges would not result in even a citrus rind addict exceeding the daily intake regarded as safe by the Joint Expert Committee.

<sup>1</sup> Innes, J M M, et al, Journal of the National Cancer Institute, 1969, 42, 1101.
<sup>3</sup> Robinson, H J, Stoerk, H C, and Graessle, O E, Toxicology and Applied Pharmacology, 1965, 7, 53.

I recently read that premenstrual tension can easily be cured by natural progesterone but not progestogens and that these are readily administered either in the form of vaginal or rectal pessaries. Is this true and if so which preparations are advised?

Premenstrual tension is presumed to be caused by a relative imbalance of progesterone and oestrogen in the second half of the menstrual cycle, although there is precious little experimental evidence in support of this contention. There is a considerable subjective element in the condition, and it is not easily cured by anything. A popular treatment has been to give progesterone or synthetic progestins. Progesterone is not active by mouth, but the synthetic progestins, derivatives of 19-nortestosterone or  $17\alpha$ -hydroxyprogesterone, are orally active. There is no good reason to give either by pessaries. Usually the  $17\alpha$ -hydroxyprogesterone derivatives are preferable to nortestosterones—for example, medroxyprogesterone acetate 5 mg daily throughout the second half of the cycle. One or two infiltrating. The overall prognosis, therefore, should improve. Most of the patients experienced the classical symptoms of painless haematuria but one presented with painful haematuria. In a series of 216 patients presenting to two urological outpatient departments Turner *et al*<sup>3</sup> found that 39% with urothelial tumours also had infection. We therefore believe that all cases of haematuria should be investigated, even if there are symptoms suggesting infection.

Table V shows that urine cytology gave disappointing results in these early tumours, with an 83% false-negative rate. Intravenous urogram results for 5 of the 12 patients with bladder tumours were normal, emphasising the need for routine cystoscopy as well as urography.

Four of the cases remained undiagnosed, which is in keeping with other series of patients presenting with haematuria.<sup>4 5</sup>

#### References

<sup>1</sup> Wallace, D M, and Harris, D L, Lancet, 1965, 2, 332.

- <sup>2</sup> Wallace, D M, Chisholm, G D, and Hendry, W F, British Journal of Urology, 1975, 47, 1.
- <sup>3</sup> Turner, A G, et al, British Journal of Urology, 1977. In press.
- <sup>4</sup> O'Reilly, P H, Postgraduate Medical Journal, 1974, **50**, 746.
- <sup>5</sup> Burkholder, G V, et al, Journal of the American Medical Association, 1969, **210**, 1729.

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compounds more closely related chemically to progesterone are also available. One of these, dydrogesterone, has met with some success in treating premenstrual tension. It is sold in 10-mg tablets and, like medroxyprogesterone acetate, should be given in the last fortnight before the period.

Are there any particular parts of the country to which people with rheumatic or arthritic conditions could be advised to retire. Do soil conditions have any effect on lessening symptoms of rheumatism or arthritis?

Patients with chronic rheumatic conditions are advised to be careful as to where they intend to live on retirement. They should ensure that there are adequate social services and facilities for the aged or the infirm locally, and a good public transport service. Although a village community is superficially attractive, it may well be difficult to reach the hospital, and transport to the nearest town may present problems. It is also important that retirement should be planned well in advance and that before moving anybody should try to get to know that particular locality well and even, perhaps more important, their potential neighbours and fellow citizens. It is seldom a good idea to retire to a seaside town. During the off season these are often lonely places with relatively limited medical and social facilities. The weather, particularly on the east coast, may be very inclement during the winter months. It is important also that the topography of the chosen place should be taken into account. There are many sheltered, pleasant seaside towns on the south coast that have the disadvantage of being extremely hilly, and patients with rheumatic complaints would find it difficult to get to and from the local shops.

There is no evidence that soil conditions have any effect on lessening the symptoms of rheumatism or arthritis. There is, however, some evidence that damp and cold together make the pain of arthritis worse. On basic principles, therefore, it would be better to choose a site with good drainage and absence of winter fog and mists that is not too exposed to the elements but is neither too hilly nor too remote to make it possible to get out easily. Perhaps the most important advice to give to people who are about to retire is that they should make sure that their retirement is not one that just means stopping work but that they can do those things that they have always wanted to do. It is also important that they join in activities other than work to keep themselves busy, healthy, and occupied. This is often more easily arranged near to where they have always lived rather than in a remote picture-postcard environment.