Variable (normal range)	Before operation	During operation			After operation				Maximum change
		At 10 min	At 20 min	At 30 min	At 2 h	At 4 h	At 6 h	At 24 h	
Haemoglobin (g/l) (115-165)	123 (102-146)	113 (95-125)	113 (96-125)	114 (97-124)	115 (99-126)	113 (94-133)	112 (93-127)	116 (95-128)	-15 (-39 to 5)
Packed cell volume (0.37-0.42)	0.38 (0.32-0.43)	0.34 (0.31-0.40)	0.36 (0.31-0.47)	0.35 (0.31-0.39)	0.35 (0.30-0.40)	0.34 (0.29-0.39)	0.33 (0.26-0.38)	0.34 (0.30-0.39)	-0.06 (-0.03 to -0.12)
Sodium (mmol/l) (135-145)	141.0 (138-144)	138.4 (125-142)	139.0 (134-142)	138.5 (130-141)	138.3 (130-143)	137.0 (130-143)	139.3 (129-140)	139.3 (135-146)	-4.8 (-16 to 5)
Potassium (mmol/l) (3.5-5.0)	4.2 (3.6-4.8)	3.6 (3.2-4.2)	3.6 (3.3-4.0)	3.7 (3.4-4.0)	3.7 (3.1-4.0)	3.8 (3.4-4.6)	3.8 (3.0-4.1)	3.9 (3.3-4.4)	-0.45 (-1.6 to 0.8)
Creatinine (μ mol/l) (70-150)	78.8 (61-104)	72.3 (58-94)	72.8 (56-95)	73.5 (59-94)	75.2 (58-92)	72.7 (58-88)	72.5 (61-87)	77.9 (59-99)	-2.7 (-37 to 18)
Total protein (g/l) (60-80)	74.7 (66-86)	66.3 (59-79)	66.2 (56-81)	64.6 (55-78)	68.4 (59-84)	67.3 (59-78)	66.1 (59-82)	68.9 (63-81)	-10.5 (-24 to -4)
Albumin (g/l) (35-50)	45.1 (40-49)	40.4 (35-45)	40.5 (34-45)	40.2 (33-45)	41.5 (36-47)	41.4 (37-45)	40.9 (36-46)	42.2 (37-47)	-4.8 (-14 to 6)
Osmolality (mmol/kg) (278-305)	282.7 (276-290)	281.9 (274-293)	281.5 (275-293)	280.9 (273-290)	280.2 (271-291)	279.9 (272-285)	282.8 (270-289)	282.8 (274-293)	-2.22 (-15 to 5)
Glycine (mmol/l) (0.01-0.50)	0.34 (0.25-1.00)	1.88 (0.25-5.00)	2.75 (0.25-11.00)	3.25 (0.25-16.50)	0.95 (0.25-3.30)	0.44 (0.25-1.00)	0.36 (0.25-1.00)	0.36 (0.25-1.00)	3.14 (0 to 16.25)
Lactate dehydrogenase (IU/l) (70-170)	154.8 (120-183)	137.8 (107-184)	151.2 (109-204)	146.4 (110-197)	174.1 (105-448)	172.1 (95-371)	182.0 (114-456)	122.3 (99-132)	36.7 (-70 to 294)

in plasma glycine concentration, peritoneal fluid from one having a glycine concentration of 75 mmol/l. All variables measured returned to baseline values within 24 hours, and no patient had clinical evidence of the transurethral syndrome.

Comment

Transcervical endometrial resection in which 1.5% glycine solution is used to distend and irrigate the uterus does carry a risk of fluid overload and rapid dilutional hyponatraemia during the operation. There were no clinical sequelae to these fluid shifts in our study, but recently a woman absorbed 4350 ml of irrigant during the operation and her plasma sodium concentration fell to 117 mmol/l; she responded promptly to diuretics, although the sodium concentration took 24 hours to return to normal.

During the operation some irrigant must infuse into opened myometrial vessels, but, unlike in laser ablation,³ transtubal loss and rapid peritoneal absorption also seem to be important in electroresection. Pre-operative tubal occlusion may thus be useful in high risk cases.

In summary, fluid balance must be closely monitored during endometrial resection, ideally with a continuous

flow instrument.⁴ The main biochemical effect of fluid overload is hyponatraemia, so plasma sodium concentrations should be measured if more than 900 ml of irrigant is absorbed; severe hyponatraemia is unusual unless the fluid deficit is large (>2 litres). In cases that are less severe plasma biochemical variables return to normal spontaneously within 24 hours, which is advantageous if the procedure is done on an outpatient basis.⁵

We are grateful for the helpful suggestions of Mr J C Smith, consultant urologist, and Mr M G W Kettlewell, consultant surgeon, at Oxford and for the technical help of Mr Jay Warren. RB was supported by a grant from NHS Locally Organised Research.

- Magos AL, Baumann R, Turnbull AC. Transcervical resection of endometrium in women with menorrhagia. *Br Med J* 1989;298:1209-12.
- Rao PN. Fluid absorption during urological endoscopy. *Br J Urol* 1987;60:93-9.
- Morrison LMM, Davis J, Sumner D. Absorption of irrigating fluid during laser photocoagulation of the endometrium in the treatment of menorrhagia. *Br J Obstet Gynaecol* 1989;96:346-52.
- Iglesias JJ, Sporer A, Gellman AC, Seebode JJ. New Iglesias resectoscope with continuous irrigation, simultaneous suction and low intravesical pressure. *J Urol* 1975;114:929-33.
- Magos AL, Baumann R, Cheung K, Turnbull AC. Intra-uterine surgery under intravenous sedation as an out-patient alternative to hysterectomy. *Lancet* 1989;ii:925-6.

(Accepted 27 September 1989)

Should radiologists talk to patients?

Stephen R Vallely, J O Manton Mills

Increased use of procedures such as angiography, ultrasound, and interventional techniques has resulted in a closer relationship between patients and radiologists. Many radiologists, however, are reluctant to discuss investigations with patients in detail, reasoning that patients are only temporarily in their care. Some clinicians agree with this view on the basis that radiologists do not know all the facts about the patient and are not ultimately responsible for clinical management.

We determined the views of NHS patients, radiologists, and clinicians on what radiologists should discuss with patients about their investigations.

Patients, methods, and results

We sent a detailed questionnaire to 400 consecutive outpatients attending the radiology department of this

hospital for a barium meal examination or barium enema. We also sent a questionnaire to 53 radiologists in Northern Ireland, asking how they communicated with patients attending for barium studies, and to 37 clinicians with an interest in gastroenterology, seeking their views on what radiologists should tell patients. The radiologists and clinicians were invited to reply anonymously.

The response rate was 72% (287/400) for the patients, 62% (33/53) for the radiologists, and 87% (32/37) for the clinicians (of whom 21 were surgeons). The mean age of the patients was 50.1 years (range 18-83), and 147 patients had a barium meal examination and 140 a barium enema.

Altogether 101 patients were men and 186 women. Fears that cancer might be diagnosed were expressed by equal proportions of men and women (53% (53) and 52% (97) respectively). Of 126 patients who had had symptoms for <12 months, 58 (46%) were worried they might have cancer. There were 161 patients who had had symptoms $\geq$ 12 months and of these 86 (53%) were similarly worried. Eight (3%) were found to have cancer; of these five had been worried about cancer before investigation. Referring clinicians gave a pro-

Department of Radiology,
Royal Victoria Hospital,
Belfast BT12 6BA

Stephen R Vallely, MB,
registrar
J O Manton Mills, FRCR,
consultant radiologist

Correspondence and
requests for reprints to: Dr
Mills.

Br Med J 1990;300:305-6

	If result normal (A)	If result abnormal but condition non-malignant (B)	If result shows malignancy		Reassure that patients do not have cancer in A or B
			Patients ask	Patients do not ask	
Radiologists (n = 33) thought they should tell patients:					
Always or usually	21	16		3	15
Occasionally	11	16		18	15
Never	1	1		12	3
Clinicians (n = 32) thought radiologists should:					
Tell patients	32	27	4		
Not tell patients		5		8	
Tell patients clinician will discuss result with them (C)			13	19	
C, and used euphemisms			15	5	

visional diagnosis to 113 (39%) patients; despite this 62 (55%) were still concerned.

When the patients were asked whether they would wish to know the result of the examination immediately, 269 said that they would and five that they would not and 13 did not know. When asked to tick what the test might show 36 patients indicated cancer and 132 other conditions and 119 did not know. The table shows the radiologists' and clinicians' views.

Comment

When patients undergo investigations their speculations may be worse than the truth, and they are inevitably anxious between when the test is done and when they are given the result.¹ In this hospital the delay is usually one to three weeks. Relaying the result to the patient may be further delayed, particularly in a large hospital, by problems with medical records and lack of communication between doctors. This study showed that results of tests on 96% of the patients were either normal or indicated a non-malignant condition. Thus most patients could have had the stress of uncertainty alleviated by immediate reassurance or explanation.

The survey indicated several points. Firstly, an appreciable proportion of patients worry about having cancer. Secondly, most patients wish to know the truth as soon as possible. This agrees with findings of other studies,^{2,3} although many radiologists seem to be unaware of this. Thirdly, radiologists should discuss the diagnosis with the patient, and when no malignancy is found they should categorically reassure the patient. When malignancy is diagnosed or strongly suspected radiologists should indicate that they will discuss the result with the clinician, and when talking

to patients they should use euphemisms such as bowel obstruction or large ulcer. Fourthly, x ray departments are not usually a suitable setting for giving bad news.

Doctors' attitude to communicating information about cancer honestly has changed considerably over the past 20 years.⁴ We think that when carcinoma is certain radiologists and clinicians should liaise as rapidly as possible and relay the information to the patient or relatives, or both, in privacy and without delay.

1 West TS, Kirkham SR. The family. In: Saunders C, ed. *Hospice: the living idea*. London: Edward Arnold, 1981:53-65.

2 Cassileth BR, Zupkis RU, Sutton-Smith K. Information and participation practices among cancer patients. *Ann Intern Med* 1980;92:832-6.

3 Lichter I. Communication. In: Doyle D, ed. *Palliative care: the management of far-advanced illness*. Philadelphia: Charles Press, 1984:444-60.

4 Novack DH, Plummer R, Smith RL, Ochtill H, Morrow GR, Bennett JM. Changes in physicians' attitudes toward telling the cancer patient. *JAMA* 1979;241:897-900.

(Accepted 4 October 1989)

Corrections

Immunoscintigraphy for detecting acute myocardial infarction without electrocardiographic changes

An authors' error occurred in this paper by Dr Diwakar Jain and others (20 January, p 151). In the second paragraph of the patients and methods section the ²⁰¹Tl scans were performed during the second imaging with 74 MBq of ²⁰¹Tl and not 740 MBq as published.

Effective use of regional intensive therapy units

An editorial error occurred in this paper by Dr Jane A M Purdie and others (13 January, p 80). The key in the legend of the scatter diagram should have been (○ = survivors, ■ = deaths) and not the other way around as published.

ONE HUNDRED YEARS AGO

At the last meeting of the College of Physicians a report was received and adopted from a Committee of the Council of the College which had been appointed to consider a communication from the Foreign Office in reference to the terms on which in future English medical men will be allowed to practise in France. The report, which was unanimously adopted, drew attention to the following points, some of which were briefly alluded to in the JOURNAL of February 1st; but the great importance of the subject justifies a further notice in detail. First: With regard to the facilities already open to French doctors of medicine desirous of practising in England. 1. Although a French medical man possessing no British qualification cannot at present be registered in this country, he is free to practise his profession without hindrance in any part of the United Kingdom, and is only subject to certain disabilities incidental to non-registration, namely, (a) that he cannot recover his charges if disputed in a court of law, and this disability he shares with all the Fellows of the College of Physicians; (b) that he cannot sign certificates of the cause of death; (c) that he is disqualified for certain public appointments. 2. A Doctor of Medicine of France desiring an English qualification can obtain the licence of the College which will entitle him to

registration, and confer the legal status of a physician by merely passing the final or purely professional examination and paying the fee, the French courses of instruction and the examination in letters and science being accepted. Secondly: Clauses 12 and 17 of the Medical Act of 1886 provide for complete reciprocity as regards British and foreign practitioners holding mutually recognised qualifications, such foreign practitioners being entitled to registration in this country without examination on payment of a registration fee whenever such foreign country grants a like privilege to English subjects. Thirdly: With regard to English doctors in France, the Committee were careful to point out that there was no desire to claim for English medical men, even when holding an English qualification satisfactory to the French authorities, that they should be admitted to the privileges of French practitioners without examination and without payment of the tax to which the latter are liable; but it is suggested that the French authorities might well concede what is granted to French Doctors of Medicine, namely, that they should be admitted to a full professional qualification on passing a complete and practical examination in purely professional subjects. (*British Medical Journal* 1890;i:310.)