

# Do patients want to be informed?

## *A study of consent for cardiac catheterisation*

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**SUMMARY** One hundred and four patients were asked to recall what they had been told before they gave consent for cardiac catheterisation to be performed. Of these, 14% had received no explanation, 24% had not been warned to expect specific symptoms or side effects, 40% had been told that complications were possible, and 26% had been warned that there was a risk of death. Most patients did not know about these risks, and two thirds would not have wanted to be told about them. Doctors should neither insist on gaining fully informed consent from anxious patients nor deny detailed information to inquiring ones.

In the United Kingdom doctors need not disclose all the risks of a procedure to each patient,<sup>1</sup> so they sometimes withhold information in the belief that they are preventing unnecessary worry. Since patients' attitudes to informed consent have rarely been studied the adequacy of consent obtained before cardiac catheterisation was assessed by comparing what patients understood about the procedure and its risks with their estimates of how much they wanted to be told and with current legal guidelines.

### Patients and methods

One hundred and four randomly selected patients were interviewed by one of five medical students less than two days after elective cardiac catheterisation using a standard questionnaire. All had undergone routine catheterisation after premedication with 10 mg diazepam orally. Consent was obtained in the normal manner by doctors, usually house physicians, who did not know about the study or its purpose; this was confirmed by direct inquiry when the study was completed. Subjects were asked not to disclose any questions to other patients, and if asked about the project the students explained only that they were studying "what patients think about catheter tests."

Sixty men and 44 women aged 18-74 years (mean 49, SD 12) years were studied; their social class distribution was similar to the 1971 UK census. Of

Table 1 *Recall of cardiac catheterisation. Figures are numbers and percentages of patients*

	No	%
<i>Procedure*</i>		
Right heart catheterisation (68)	21	31
Left heart catheterisation (102)	66	65
Angiography (102)	96	94
Manometry (104)	15	14
<i>Symptoms†</i>		
Effects of contrast media		73
Local anaesthetic injection		37
Pain at site of catheter insertion		36
Palpitation		16
Chest pain		13
Backache		3
Dyspnoea		3

\*Figure in parenthesis is the number of patients who had each procedure.

†Reported as percentage of all patients at risk of each symptom.

these, 48% had valvar heart disease and 38% coronary artery disease, including some with both; others had congenital heart disease (7%), cardiomyopathy (7%), or no abnormal findings (6%).

### Results

Most patients understood and recalled angiography, but few could describe right heart catheterisation or the measurement of intracardiac pressures (Table 1); 93% remembered some unpleasant symptoms; 14% had been very apprehensive.

Some patients received no explanation from doctors (Table 2), but most of these (9/15, 60%) had not wanted one. Other patients had wanted more infor-

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Table 2 Sources and adequacy of information about cardiac catheterisation. Figures are percentages of all patients (n=104)

<i>Medical sources of information*</i>		(86%)
Consultant		9
Senior registrar or registrar		27
Senior house officer		8
House officer		40
Other doctor not identified		13
No explanation from doctors		14
No information from any source		4
<i>Information from other patients*</i>		(64%)
Factual statements		18
Reassurance		43
Comments which caused anxiety		10
<i>Adequacy of information</i>		
Explanation not understood		3
More information wanted		20
Written information would be helpful		25

\*More than one answer possible. The total percentage who obtained information from these sources is given in parenthesis.

Table 3 Recall of previous warnings. Figures are percentages of all patients (n=104)

<i>Symptoms during catheterisation:</i>		
Effects of contrast media		75
Palpitation		11
Bleeding or bruising		6
General discomfort		4
Possible allergic reaction		1
Other		8
No specific warnings recalled		24
Complications mentioned in general		40
<i>Risk to life:</i>		
Explained to patient		26
Assumed by patient		15
Not understood		59
Known by relatives		17

mation but half (10/21, 48%) had not had the opportunity to ask questions. A few (4%) thought the procedure had been a form of treatment rather than an investigation. Seventy six per cent had been warned that they might experience particular symptoms during cardiac catheterisation (Table 3). Some patients had been told that it carried a risk to their life; others had assumed this because of previous knowledge or deduced it because they were asked to sign a consent form. Most of the patients who did not appreciate this risk (37/61, 62%) would not have wanted to be told about it. Forty two per cent of the patients who knew the risks had told their relatives; 18% of those who had not been told would have wanted their relatives to know.

Eighty six per cent of the patients would have given consent whatever the risk involved. Others gave estimates of the risk of death which they would have accepted as being between 1 in 100 and 1 in 4000 (mean 1 in 933, n=7). When told that the risk of death from cardiac catheterisation was about 1 in 1000, 99% said that if they had been told this they would still have given consent.

## Discussion

Many patients were poorly informed about cardiac catheterisation and its risks. Premedication with diazepam may have contributed to poor recall of the procedure but not to poor recall of the consent interview, because it does not cause retrograde amnesia.<sup>2</sup> Patients may have forgotten risks which had been mentioned to them, as other authors report,<sup>3</sup> but this could not be tested because observation would have influenced the doctors while they obtained consent. Nevertheless patients usually remember the most important things that doctors tell them.<sup>4</sup>

When patients receive no explanation, as reported by 14% in this study, consent may be invalid even when a form has been signed.<sup>5</sup> When a doctor has explained a procedure but failed to disclose its risks he may be negligent when a complication occurs<sup>6</sup> but only if in similar circumstances a reasonable doctor would have informed his patient and if the patient would then not have suffered injury because he would not have given consent. The duty to disclose risks is greater when a procedure is not essential or is associated with particular risks<sup>1</sup>; nevertheless, legal precedent suggests that the risks of elective cardiac catheterisation fall between the extremes where disclosure is considered unnecessary or mandatory.<sup>5</sup> The Court of Appeal recently reaffirmed that what to disclose is a matter of medical judgment<sup>7</sup> so most patients in this study were probably adequately informed in a legal sense.

Doctors who impose informed consent on patients, such as those in this study who did not want to know the risks of catheterisation, may be practising an ethically unjustifiable form of medical paternalism.<sup>8</sup> Nevertheless, a substantial minority did want more information, and those patients who ask questions must be given more detailed answers.<sup>9</sup> More explanation could have helped those who were apprehensive or exposed to misleading comments from other patients. There was no evidence that disclosure of the main risks of catheterisation would have prevented patients from giving consent.

Consent procedures should be based on each patient's wishes and requirements rather than on rigid rules. Doctors should take time to talk to their patients in a sympathetic way and encourage them to ask questions in order to try to determine how much they want to know. Consent should be obtained without stress, on a different day, and in a different environment from those of the procedure. If the doctor who is to perform cardiac catheterisation delegates his responsibility to obtain consent he should ensure that his junior colleagues are familiar with the procedure and its risks. Training and supervision in interviewing skills and the obtaining of informed consent should be

available to medical students and newly qualified graduates.

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#### References

- 1 Samuels A. What the doctor must tell the patient. *Med Sci Law* 1982; 22: 41–6.
- 2 Clarke PRF, Eccersley PS, Frisby JP, Thornton JA. The amnesic effect of diazepam (valium). *Br J Anaesth* 1970; 42: 690–7.
- 3 Cassileth BR, Zupkis RV, Sutton-Smith K, March V. Informed consent — why are its goals imperfectly realized? *N Engl J Med* 1980; 302: 896–900.
- 4 Health Education Studies Unit. *Final report on the patient project*. London: Health Education Council, 1982.
- 5 Chatterton v Gerson. *Weekly Law Report* 1980; 3: 1003–15.
- 6 Lord Hailsham, ed. *Halsbury's laws of England*. 4th ed. Vol 30. London: Butterworths, 1980: 34.
- 7 Brahams D. The surgeon's duty to warn of risks: transatlantic approach rejected by Court of Appeal. *Lancet* 1984; i: 578–9.
- 8 Gert B, Culver CM. Paternalistic behaviour. In: Cohen M, Nagel T, Scanlon T, eds. *Medicine and moral philosophy*. Princeton: Princeton University Press, 1982: 201–13.
- 9 Robertson G. Informed consent to medical treatment. *Law Quarterly Review* 1981; 97: 102–26.