Rapid appraisal of clinicians' reactions to guidance from the National Institute of Clinical Excellence on use of glycoprotein IIb/IIIa antagonists for acute coronary syndromes

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Introduction

We conducted a postal survey of UK consultant cardiologists to assess reaction to the guidance issued by the National Institute of Clinical Excellence (NICE) on the use of glycoprotein IIb/IIIa antagonists (GPAs) for acute coronary syndromes.[1]

Key words: NICE, glycoprotein IIb/IIIa antagonists, non-ST-elevation acute coronary syndrome, percutaneous transluminal coronary angioplasty.

Participants and methods

A one page questionnaire was mailed to 385 consultant cardiologists listed on the membership database of the London Royal College of Physicians, representing 71% of the total for England.[2] The covering letter stated that this was a survey of consultant cardiologists' opinions on the management of unstable angina; it also stated the survey was being undertaken as part of the NHS Health Technology Assessment Programme. The survey was conducted in February 2001, approximately four months after publication of the guidance by NICE.

To allow results to be produced quickly, only replies received within four weeks of dispatch were analysed and no attempts were made to contact non-responders.

The first part of the questionnaire consisted of brief descriptions of four hypothetical patients with high-risk non-ST-elevation acute coronary syndrome (NSTACS), and a list of possible treatments (clopidogrel in place of aspirin; unfractionated heparin; low molecular weight heparin, and glycoprotein IIb/IIIa antagonists) for each. In two cases the vignette stated that urgent angiography with a view to intervention was planned; in the other two this was not specified. Respondents were asked to state, for each hypothetical patient, whether they would administer the treatments listed; and the degree of certainty they held about each decision, using a Likert scale from 6 (completely certain) to 1 (completely uncertain). Means were calculated for each pair of cases.

In the second part of the questionnaire the NICE recommendations were summarised. Respondents were asked to estimate what proportion of patients undergoing elective percutaneous transluminal coronary angioplasty (PTCA) in their own institution would receive glycoprotein antagonists both now and in six months' time. A similar question was asked about their use for patients with unstable angina as part of their initial medical management, prior to any consideration of angioplasty. In the event of proceeding to intervention, would respondents continue a glycoprotein IIb/IIIa antagonist? The third question asked about the percentage of patients who would be given a glycoprotein IIb/IIIa antagonist once they had been accepted for 'angiogram and proceed'.

Results

A total of 97 questionnaires were returned, a response rate of 25%. Of these responses 37% were from teaching hospitals or cardiac centres; 36% of cardiologists described themselves as interventionists, and 44% obtained their basic medical qualification in 1980 or before.

Results for use of glycoprotein IIb/IIIa antagonists (GPA) are shown in table 1. Some 92% of respondents stated a GPA should be used in the hypothetical cases when urgent angiography was planned and 66% when it was not. However, the numbers of respondents stating that the agents would be used in the majority of such patients in their own centres were much lower, at 18% and 6% respectively. Expected rates of use six months into the future were all significantly higher, but still far short of what would be expected if the NICE guidelines were adopted.

Comment

Reporting and response bias may have occurred but these are more likely to overestimate than underestimate the expected uptake of GPAs.

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Table 1. Cardiologists' opinions about appropriate and actual use of glycoprotein antagonists for indications suggested by the National Institute of Clinical Excellence

Clinical indication	% respondents stating appropriate to use in case vignettes	Median certainty (IQR) (6=completely certain; 1=completely uncertain)	% respondents whose institution uses GPA in >50% of patients with specified clinical indication (unstable angina/elective PCI)		
			Now	Estimate in six months' time	P value for difference
High-risk NSTACS; urgent angiogram planned	92%	5 (4–6)	18%	37%	0.00
High-risk NSTACS; no urgent angiogram	66%	5 (4–6)	6%	17%	0.03
Elective PCI	Not included	Not included	17%	34%	0.01

Key: NSTACS = non-ST-elevation acute coronary syndrome; PCI = percutaneous coronary intervention; GPA = glycoprotein IIb/IIIa antagonists

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Key messages

- Routine use of GPA as recommended by NICE does not appear likely in the near future
- Rapid appraisal of clinicians' reaction to other NICE appraisals can be undertaken by postal survey

Routine use of GPAs as recommended by NICE does not appear likely in the near future despite high levels of confidence in their appropriateness in specific cases. Possible explanations for this paradox are:

- belief that local resource constraints will override central guidance
- suspicion that extrapolation of trial results to routine practice is overdone[3]
- expectation of rapid obsolescence as further evidence emerges, exemplified by the recent data regarding clopidogrel.[4]

Rapid appraisal of clinicians' reaction to other NICE appraisals could be undertaken in a similar way at minimal cost. It might help to understand such issues and guide the implementation process.

References

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