return the questionnaire' all the sample were sent reminders, and the measurement concerned perceived memory problems. The fact that these are strongly associated with emotional distress rather than age or menopause is of importance as it allows an alternative understanding of aetiology.

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Infrared ear thermometry

We read with great interest Hay *et al*'s article on infrared thermometry.[1] They used axilla temperature as the gold standard against which the infrared tympanic membrane temperature (TMT) was compared. The fundamental fault of this study lies with the fact that axilla temperature was not a gold standard for body temperature measurement. It was found to be poorly correlated with core temperature by a previous meta-analysis.[2] The best reference site would be rectal temperature — the generally accepted gold standard for temperature measurement in children.[3] As exercise increases body temperature, the study was further hampered by a lack of stipulated rest before measurement.

In a previous study done in this department, we found infrared thermometers to be reliable in neonates;[4] previous meta-analysis showed such thermometers to be unreliable.[5] However, the main problem of the meta-analysis was grouping different infrared ear thermometers as one single entity when each brand should be tested on its own.[6] The accuracy of TMT could be enhanced by taking two readings and recording the higher one as representative of core temperature.[4]

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Author's response

We thank Ng *et al* for their response to our paper.[1] They raise the interesting issue of gold standards for the measurement of fever. To our knowledge, there is no such single accepted and universally agreed gold standard. In their review article, they summarise the differences between axillary, rectal, tympanic, and pulmonary artery measures using different types of thermometers, but do not present original data to support their assertion that rectal thermometry represents such a 'gold standard'.[2] We were conscious of this issue when we analysed our data and wrote the paper; for this reason we discussed in our introduction the rationale for why we chose to use both measures of agreement and diagnostic accuracy.

The issue of rest prior to thermometry would be important if this was routine in clinical practice. However, we see the results of our study as generalisable to the real world in which children arrive in surgery in varying states of unrest.

It appears that we agree with Ng *et al* more than we disagree: we agree that thermometry using different instruments in different body sites and in different age groups leads to measurement differences. Given that treating fever in the home is widespread,[3] the questions that still need addressing are: 1) rather like the differences between clinic and ambulatory blood pressure measures,[4] which instrument and site best predicts the child's prognosis as opposed to the immediate diagnosis of fever? 2) when should a thermometer be used? and 3) when, and if, a gold standard is established, which instrument and site offers the best agreement?

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