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Sir,

Retinal haemorrhages following Retcam screening for retinopathy of prematurity

We read with interest the article by Adams *et al*[1] describing retinal haemorrhages following Retcam examination for retinopathy of prematurity (ROP). On both visits, they detected no retinal haemorrhages initially by Retcam, which were detected later by indirect ophthalmoscopy, although they do not mention the stage of vessel maturation or presence of ROP. We routinely perform ROP screening by the Retcam and have not observed any retinal haemorrhages. Following the authors report, we performed indirect ophthalmoscopy 60 min after ROP screening with Retcam in 50 eyes of 25 children; however, failed to detect such retinal haemorrhages and it seems to be of rare occurrence. It is possible that immature fragile vasculature in very premature babies as in this case or very vascular ROP may present with retinal haemorrhages by inadvertent ocular pressure during the Retcam examination.

A rise in intraocular pressure is not uncommon as disc pulsations are induced during examination when pressure is applied from the hand piece. Although we use the second-generation 130-degree ROP lens, the presence of small pupils and persistent ocular movement makes it difficult to visualize the periphery; with a need to tilt the head and the hand piece in various configurations to obtain a suitable view, which causes an increase in pressure. It is essential to ensure that the coupling solution is replenished repeatedly as it flows out of the eye during the examination, as a lack of it causes a blurring of image, with more manoeuvers by the observer. Proper immobilization of the head is essential to prevent sudden head jerks and consequent injury.

With modern neonatal care as younger preterm infants survive, such vascular incidents may be more common. Although such cases are rare, this report guides us to take utmost care during Retcam examination.

Acknowledgements

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Reference

1 Adams GG, Clark BJ, Fang S, Hill M. Retinal haemorrhages in an infant following RetCam screening for retinopathy of prematurity. *Eye* 2004; **18**(6): 652–653.

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Sir,

Reply to RV Azad *et al*

We thank Professor Azad and colleagues for their interest in our case report.

At the time of examinations the baby was between 32 and 34 weeks gestation, with no suggestion of abnormalities of retinal vascularisation.

We concur with their view that this is a rare occurrence that we noted during an audit of RetCam screening against conventional indirect ophthalmoscopy. At the time of these events, the manufacturers considered that some 1 million RetCam examinations had taken place with no other similar report. They were not aware of any other Unit undertaking a similar audit process, and we are therefore interested to know that Professor Azad and colleagues have not demonstrated a similar occurrence in their study.

We agree with Professor Azad and colleagues that care must be taken not to apply excessive pressure on the eye when using the RetCam. We advise that all neonatal screening should use the lighter ROP screening head and not the heavier standard