Matters arising

must admit that these choices have not yet been subjected to a trial with independent observers. Such a design is necessary, because the interpretation of plantar reflexes is biased by previous expectations.¹¹

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Acute dysautonomia associated with Hodgkin's disease

Sir: With great interest we read the article by Dr van Lieshout and colleagues about acute dysautonomia associated with Hodgkin's disease.¹ As a measurement of blood pressure responses induced by the Valsalva manoeuvre an indirect recording of finger blood pressure was used by the authors. Unfortunately, the complete reference was not given. So far, photoplethysmographic recordings of finger volume have been used as a non-invasive check that the Valsalva

Fig Finger arterial pressure, during a Valsalva manoeuvre.

manoeuvre has been adequately performed, if arterial recording is not possible but rate changes are being studied.² As an alternative to studying the Valsalva manoeuvre non-invasively we use transcranial Doppler ultrasound recordings of middle cerebral artery flow velocity. During the Valsalva manoeuvre the middle cerebral artery flow velocity shows changes which are in parallel with the well known changes of intraarterial blood pressure. The accompanying figure displays an example in a normal subject. By means of transcranial Doppler ultrasound recordings of middle cerebral artery flow velocity it is also possible to demonstrate postural responses in a simple and non-invasive way. Compared with measurements over finger arteries, measurements of middle cerebral artery flow velocity allow a better visualisation of autonomic reflexes in a more central part of the circulation.

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Van Lieshout et al reply

We thank Drs Reinecke and Langohr for their interest in our paper. It is indeed unfortunate that the full reference to the FIN.A.PRES method was dropped accidentally from the list after proof reading. We agree that conventional photoplethysmography on the finger, although satisfactorily representing finger skin blood flow, is an inadequate reflection of arterial blood pressure. However, the volume clamp method of Peñáz¹ improved and tested by Wesseling and coworkers,^{2–4} as used in the FIN.A.PRES instrument provides a continuous, calibrated, phasic recording of finger arterial pressure non-invasively, as exemplified by a typical record in the figure taken during a Valsalva manoeuvre.