Parkinsonism and driving: an East Anglian experience

Sir,

The authors undertook an audit of 10 patients diagnosed as having Parkinson's disease (PD), and found that 80% were driving at the time of diagnosis. Ideally all should be advised that they should inform the Driver Vehicle Licensing Agency (DVLA) and their insurers that they have PD and give details of any drugs used when the diagnosis of PD is confirmed or when they start treatment. Only 75% of respondents who were driving were advised that it is their responsibility to do this, and only 62.5% were advised to be cautious about driving when their treatment was being changed. While 50% got further information on driving from the GP, another 37.5% got it from the Parkinson's Disease Society. A total of 87.5% agreed that a self-explanatory leaflet on PD and driving, for distribution by the diagnosing clinician, would be useful.

In PD there is a gradual and steady deterioration of nerves which control movement, causing muscle rigidity, tremors, poor balance and slowness of movement. People with PD are advised not to drive because of the gradual delay in the reflexes. In the UK the law states that patients must inform the DVLA; withholding information is an offence under the Road Traffic Act 1999. It is the driver's responsibility to ensure he/she is medically fit to drive and has valid car insurance. The Webster rating scale measures the severity of disability in PD and is used to assess fitness to drive (Madeley et al, 1990).

All people with PD should have access to a specialist nurse for advice and follow-up sessions. Although the UK pioneered the Parkinson's disease nurse specialist role, they are not consistently available for patients. Accepting the diagnosis is a significant emotional, practical and financial consideration. The PD management team should help the patient through diagnosis, support patient and carers, lessen symptoms and where possible improve prognosis. The National Institute for Health and Clinical Excellence suggests specialist review every 6 months to focus on the motor and non-motor symptoms (National Collaborating Centre for Chronic Conditions, 2006). Primary care trusts, on the other hand, may prefer follow-up based on a health need mapping approach. Multidisciplinary follow-up is essential either in the main hospital for patients with complex problems, in satellite clinics closer to patients' homes or even on a domiciliary visit to the patient's home.

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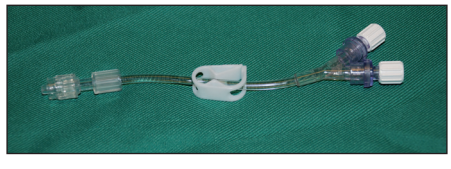
Air embolism risk from anti-reflux Y-connectors

Sir,

The Wescott WEARY-2 dual valve anti-reflux Y-connector set (Wescott Medical, Chester-Le-Street, Co. Durham) is a short Y-connector used adjacent to the intravenous cannula to connect two infusion lines (*Figure 1*), typically crystalloid on one limb and a drug from a syringe pump on the other. These connectors are used in operating theatres during intravenous anaesthesia and on wards for patient-controlled analgesia as well as for insulin-dextrose infusions.

The authors recently encountered two separate incidents where these sets were being used for intravenous anaesthesia, with a fluid infusion (under gravity) on one limb and a target controlled infusion of propofol on the other. On disconnecting the propofol infusion line from the Y-connector at the end of the anaesthetic (before transferring the patient to recovery), a continuous stream of air bubbles was seen to be entrained into the Y-connector. If unnoticed, there is a potential risk of air embolism. When using these connectors, it is imperative to be aware of this.

Figure 1. A Wescott dual-valve anti-reflux Y-connector set.



We have also noted that the caps supplied with the Y-connector are not occlusive as they have a hole through them. Therefore, if a limb of the Y-connector is not being used, it is important to ensure it is tightly closed with an occlusive cap to minimize the risk of air entrainment. Although this has been observed perioperatively, it could occur on hospital wards during the use of patient-controlled analgesia and insulin-dextrose infusions. The authors therefore urge vigilance in this regard.

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Sir,

The WEARY-2 incorporates one-way 'anti-reflux' valves, which allow passage of fluid from the distal end of the Y-connector to the patient; the valves are intended to prevent backflow of solution from one arm of the Y-connector to the other. The valves are not intended to prevent flow of either fluid or air from the open end of the Y-connector to the patient. The valves are of a 'normally closed' type, which have a very low 'cracking pressure' so that they provide the minimum flow resistance. If a negative pressure is applied to the proximal end, air can be drawn in through the valves if the distal end of the Y-connector is left open. Fluid running from one arm of the Y-connector can be sufficient to entrain air as a result of the Bernoulli effect as can a negative central venous pressure if the device is connected to a central catheter.

The protection caps supplied with the device are a 'ventilated' type to ensure thorough penetration of gas during sterilization; they are not intended to be closure caps.

Units wishing to use a self-closing variant of this should order the alternative WENOSARY, which incorporates a self-closing, swabbable valve, which automatically seals the arm of the Y-connector on disconnection of any luer connector or cap.

Neville Stebbings
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