VIDEOLARYNGOSCOPY

Two papers and an accompanying editorial discuss videolaryngoscopy. Changes in staffing and in clinical practice mean that trainees get precious few opportunities to intubate and are frequently unsuccessful. In a randomised controlled trial videolaryngoscopy improved trainee success rate. Now Joyce O’Shea and colleagues have analysed the videos from the unsuccessful intubation attempts in the trial to see what the problem was. Some trainees simply didn’t know what they were looking at. Failure to recognise the anatomy could be overcome in advance with good teaching tools and this paper includes useful videos as online files that could be used to support training. Sometimes the trainees knew what they were looking at but couldn’t get the tube to go where they wanted. This may partly be due to device design. In a separate study reported by Marie-Eve Robinson where videolaryngoscopy was used in infants getting attempted airway suction for meconium, the videos showed that the trainees were not successful at entering the trachea nearly as frequently as they thought. There are a couple of nice videos with this paper too. With less invasive surfactant administration becoming increasingly popular and trainee intubation success rates so low it appears that videolaryngoscopy may be a way to support this while at the same time minimising the number of infants given an expensive first feed. There are a variety of instruments to choose from and, as highlighted in the editorial by Nicole Pouppirt and colleagues, we will need to learn the pros and cons of the different devices. Will they simply be training tools or come into widespread routine use? These instruments record still images or videos and there will need to be consideration of how to incorporate these into the clinical record. See page F408, F413 and F401

MORE INFORMED CONSENT

Koonrungsosomboon et al performed a randomised trial of 2 different consent forms for sharing information with mothers in relation to two clinical trials comparing delayed cord clamping and cord milking. Using the principles from the Strategic Initiative for Developing Capacity in Ethical Review (SICDER) they developed a consent form that was shorter, had additional text formats (such as keywords and summary boxes) and included illustrations. In comparison with mothers provided with the traditional form, mothers who were given the SICDER form had an improved overall understanding of the form, particularly if the mother had a lower educational status. An accompanying editorial by Elizabeth Foglia provides a detailed overview, concluding that this is a significant advance that could represent a low-cost and simple method to make informed consent forms more informative for their readers. See pages F403 and F398

COGNITIVE TRAJECTORIES FROM INFANCY TO EARLY ADULTHOOD FOLLOWING BIRTH BEFORE 26 WEEKS OF GESTATION

The third Editorial in this issues relates to the article on the cognitive trajectories of extremely preterm infants by Louise Linsell and colleagues that was published in the April issue of the main edition of the journal. The article described cognitive assessments of preterm infants who were born before 26 weeks of gestation and then assessed using age standardised instrumental assessments at 2 to 3 years (Bayley), 6 to 9 years (Kauffman) and 19 years (Wechsler). There was no evidence of recovery or deterioration in cognitive function over this time-scale. Cognitive test scores obtained in infancy reflected early adult outcomes. Given the lack of later recovery, the editorial highlights the importance of optimising care strategies to minimise the contribution to poor cognitive outcome from other co-existing neonatal morbidities that might be reduced through the adoption of potentially better practices. See page F399

REDUCING CENTRAL LINE ASSOCIATED BLOOD STREAM INFECTION (CLABSI)

Victoria Payne and colleagues performed a systematic review and meta-analysis of the use of care bundles to reduce CLABSIs. There were no randomised controlled trials. There were 24 studies included of which five were observational studies and 19 before/after quality improvement studies. Overall the introduction of care bundles was associated with a 60% reduction in the CLABSI rate. It is not clear which individual elements of these bundles are most important and there is variation between the bundles in use. All depend on a multidisciplinary commitment to better practice. See page F422

MORAL DISTRESS

Trisha Prentice and colleagues investigated the perspectives of healthcare professionals on the moral distress that they experience in their workplace. They obtained the views of 345 professionals in two neonatal units. Moral distress was experienced by 72% of providers at least once a month but few thought that it should be eliminated. Although it may have negative consequences which should be mitigated it was also seen as a positive force for promoting robust discussion and supporting the interests of patients. The authors conclude that the challenge remains to create an ethical climate in the NICUs where moral distress can be discussed, its negative impacts mitigated and its beneficial effects on advocacy and empathy explored. See page F441

SUSTAINED INFLATION DURING CHEST COMPRESSIONS

Georges Schmolzer and colleagues have previously demonstrated the potential for using sustained inflations in combination with continuous chest compressions to facilitate more rapid return of spontaneous circulation (ROSC) in bradyarrhythmic asphyxiated animals. Here they demonstrate in a randomised feasibility study that it is feasible to use this approach in preterm human infants who remain bradyarrhythmic despite effective ventilation and are considered to require chest compressions. In this small study, ROSC occurred more rapidly than with traditional 3:1 cardiopulmonary resuscitation. A larger study is required to determine whether this approach is safe and effective and the authors are trying to establish a cluster randomised trial. See page F453

PHYSIOLOGICAL BASED CORD CLAMPING

Ronny Knol and colleagues describe the preclinical background and physiological basis for the physiological based cord clamping approach that they are now evaluating prospectively. This assumes that the best outcomes will be achieved if the cord is not clamped until transition is completed, with regular respiration oxygenating the blood and ensuring adequate venous return from the lungs to the left atrium to maintain cardiac output. See page F493

Highlights from this issue

Ben Stenson