

team. Majority (75%) of the handovers were presented by registrars/junior trainees with only 35% receiving any feedback.

SBAR (Situation, Background, Assessment and Recommendation) method was only used for 42% of handovers. Majority (70%) of the handovers were conducted with the aid of printed sheets, which included: patient demographics (83%), presenting complaints (85%), investigations, results and treatment plans (83%). Only 11% of handovers were done electronically. Handovers had allocated start times (96%) with designated places (89%) close to area of work. However only 63% of the handovers started on time, 20% were free from distractions by allied professionals and just 5% were 'bleep' free. 68% had some educational activity within the time allocated in the handover. WPBAs were initiated or completed in only 11% of handovers. Overall 91% of trainees felt that the quality of handover was either average or good.

**Conclusions** The findings from our survey suggest that the quality of handovers is variable. Handovers should have a structured approach and free from distractions to ensure safety and continuity of care. Incorporating formal teaching and WPBA's could help develop the role of handovers.

**G23(P) EDUCATION AND TRAINING USING AN INNOVATIVELY ADAPTED MANIKIN: SIMPLE, AFFORDABLE, FEASIBLE AND EFFECTIVE (SAFE)**

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**Introduction** Hi-fidelity manikins are often used in simulation courses. However they are very expensive and some of the skills like drainage of pneumothorax or insertion of chest-drains/rectal probes cannot be demonstrated on these manikins as they are fully loaded with various electronic equipment inside them and puncturing will damage these expensive manikins. Hence our team developed a multi-purpose, low cost, Low-fidelity manikin where wide variety of neonatal practical skills can be practised.

**Aims and methods** Aim was not only to create simulation of real clinical situations but also to teach practical skills and build the concept of team working. ALS Manikin was modified as below:

1. An innovatively-designed container with red fluid was placed in abdominal cavity and connected to synthetic umbilical cord. Umbilical arterial line was connected through an innovatively-designed simulator transducer box producing arterial wave form with feasibility to vary BP using solenoid valve.
2. Manikin's chest was drilled between ribs and lungs were made from Nitrile gloves. These lungs on connecting to flow metre were able to show positive trans-illumination test and provided air filled lungs for needle thoracocentesis and chest-drain insertion.
3. Manikin's bottom was drilled for rectal probe insertion. Thermistor from rectal probe was removed and connexions made to an innovative resistance box. With the help of Ohms Law principle, we were able to replicate any rectal temperature with an accuracy of 0.1°C.

Following above adaptations, regular simulation sessions were initiated for:

1. Trainees to undertake practical skills like emergency needle thoracocentesis, pigtail chest drain insertion, umbilical lines insertion/sampling.
2. Train nursing staff with rectal probe insertion, familiarise with connexions of chest-drain and umbilical lines.
3. Both medical and nursing staff to work in team to develop effective communication.

## Results

1. All rotating registrars have had exposure to pigtail chest-drain insertion in simulation setting and subsequently went on to undertake these skills in NICU on real patients with greater confidence.
2. Improved team working observed between doctors and nursing staff on NICU

**Conclusions** Our method of manikin manipulation is innovative, affordable and effective and can be implemented in any hospital setting to teach practical neonatal skills, improve team working, enhance competency at performing practical skills and work with increased confidence.

## Clinical Genetics Group/British Society of Paediatric Dermatology

**G24 CAPILLARY MALFORMATIONS – ARTERIOVENOUS MALFORMATIONS/ARTERIOVENOUS FISTULA SYNDROME (CM-AVM SYNDROME): AN UNDER RECOGNISED CLINICAL ENTITY?**

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**Background** Hereditary Hemorrhagic telangiectasia (HHT) tends to be the first condition to be considered in the differential diagnosis of patients presenting with high flow vascular malformations in combination with cutaneous vascular lesions. However, particularly in the paediatric population, capillary malformation-arteriovenous malformation syndrome (CM-AVM) due to RASA-1 mutation<sup>1</sup> is more likely.

**Aims** To present the clinical features of three patients with CM-AVM syndrome, promote knowledge of this condition and aid prompt diagnosis.

**Methods** Clinical examination, detailed family history, imaging (ultrasound, MRI, angiography) and genetic testing.

**Results** Patient 1 was born with a large vascular mass affecting the right side of the face and multiple cutaneous capillary malformations. Patient 2 had a spinal AV fistula and two vascular stains. Patient 3 presented with an intracranial haemorrhage secondary to a parietal AVM and was noted to have several cutaneous vascular lesions. Patients 2 and 3 were referred to the dermatology team as suspected HHT. The cutaneous vascular lesions present in all three patients were consistent with capillary malformations (in keeping with a diagnosis of CM-AVM) and were not typical of telangiectases.

**Conclusion** In patients with high flow CNS vascular lesions, it is crucial to establish the precise nature of cutaneous vascular lesions in order to request appropriate genetic testing and screening of relatives.

## REFERENCE

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**G25 RASA1 MUTATIONS AND VEIN OF GALEN ARTERIAL MALFORMATIONS**

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